

Philadelphia
Water
Department

2011
Annual
Financial
Report



| | |
|--|-----------|
| A Letter from the Water Commissioner..... | 1 |
| Water Quality..... | .2 |
| Water Environment..... | 4 |
| Watershed Protection..... | .6 |
| Asset Management..... | .8 |
| Public Education and Outreach..... | 10 |
| Management Discussion..... | 12 |
| Financial Statements..... | 19 |

| Measurement | FY08 | FY09 | FY10 | FY11 | FY12 (Goals) |
|--|--------|--------|--------|--------|-----------------|
| Millions of Gallons of Treated Water | 93,679 | 91,747 | 91,560 | 91,250 | 94,170 |
| Percent of Time Philadelphia's Drinking Water Met or Surpassed State & Federal Standards | 100% | 100% | 100% | 100% | 100% |
| Miles of Pipeline Surveyed for Leakage | 1,113 | 931 | 1,133 | 997 | 1,130 |
| Water Main Breaks Repaired | 687 | 802 | 646 | 954 | 850 |
| Avg. Time to Repair a Water Main Break (hrs.) | 7.6 | 7.6 | 7.8 | 7.6 | 8.0 |
| Number of Storm Drains Cleaned | 75,804 | 77,012 | 72,802 | 71,771 | 111,444 |

A Letter from the Water Commissioner.



To our colleagues:

The Philadelphia Water Department (PWD) is facing a range of challenges. This is not a new situation for us, and we are taking an aggressive position to achieve success: not only doing more with less, but also doing it better.

As a municipal utility, we serve the citizens of the Philadelphia region by providing integrated water, wastewater and stormwater services. We operate these services at the highest quality possible, while remaining competitive in our rate structures. PWD must maintain the infrastructure necessary to provide this quality, affordable drinking water. We protect public health, provide an adequate and reliable water supply for all residential, business and public needs, and sustain and enhance the region's watersheds and quality of life by managing wastewater and stormwater effectively. Our water continues to be safer than ever, and substantially better than what is required by State and Federal regulations.

It has been a year of achievements. PWD's wastewater treatment facilities are award-winners, receiving silver or platinum awards from the National Association of Clean Water Agencies for meeting permit requirements. We are integrating innovative, cost-effective and sustainable processes and technologies into a range of practices. Our commitment to this is central to the "Green City, Clean Waters" program. PWD is collaborating with partners from institutions to contractors to businesses to neighborhoods as we move forward with the program. It will contribute to Philadelphia's economic growth while adding beauty to our streets – and helping control stormwater runoff.

Managing energy costs is one of our major, on-going challenges. We are expanding our successful solar project at the Southeast Water Pollution Control Plant. We are also planning a 5.6 megawatt biogas cogeneration project at the Northeast Water Pollution Control Plant that will use the digester gas produced as a by-product of its sewage treatment process to produce electricity and process heat.

This annual financial report contains some of our accomplishments for Fiscal Year 2011. We continue to maintain the credit rating of our revenue bonds, and all three of the major rating agencies (Moody's, Standard and Poor's and Fitch) continue to rate the Department's debt in the A range.

Our commitments and accomplishments would not be possible without PWD's dedicated and professional staff, many of whom hold leadership positions in regional environmental and regulatory bodies as well as professional associations. Our union-represented employees can be seen day or night making repairs, removing debris from our waterways, and ensuring that PWD's water and wastewater facilities continue to perform at the highest levels.

Sincerely,

A handwritten signature in black ink, appearing to read "H. Neukrug".

Howard M. Neukrug, P.E.
City of Philadelphia, Water Commissioner





Partnership for Safe Water

The Philadelphia Water Department (PWD) consistently produces high quality drinking water, substantially better than the drinking water quality standards set by State and Federal regulations. As a member of the Partnership for Safe Water since 1996, PWD has adopted, as standard practice, treatment goals far stricter than the regulatory requirements. In 2008, the Baxter, Queen Lane and Belmont Water Treatment Plants were honored with the Partnership for Safe Water 10-Year Director's Award in recognition of PWD's decade-long commitment to achieving and maintaining the highest possible drinking water quality.

Since 1998, the PWD average turbidity level (measure of water clarity) of drinking water has been at or below 0.06 nephelometric turbidity units (NTU). The turbidity of Philadelphia's water is 80 percent less than the maximum of 0.30 NTU allowed by State and Federal regulations and is 40 percent less than the Partnership for Safe Water turbidity goal of 0.10 NTU.

The Partnership for Safe Water is a voluntary optimization program conceived and initiated by the U.S. Environmental Protection Agency, the American Water Works Association, the Association of Metropolitan Water Agencies and advocated by the Pennsylvania Department of Environmental Protection. Pennsylvania leads the nation in participation in this program and the Philadelphia Water Department is one of Pennsylvania's leaders.



Quality

Stormwater Management Service Charge

The Philadelphia Water Department is currently in the second phase of a parcel area based Stormwater Management Service Charge (stormwater fee), which went into effect on July 1, 2010. This charge is applicable to all non-residential parcels that are within the City's limits and is not a new charge to existing water/sewer customers.

The monthly fee is now assessed based on a parcel's gross area (lot size) and impervious area (compacted hard surface that prevents absorption of water) and is billed as a separate line item on the water/sewer/stormwater utility bill. In addition, properties that do not have water/sewer service are now assessed a monthly stormwater fee, as those properties also contribute stormwater runoff during rainstorms.

PWD has also established a credit program to provide an incentive to non-residential customers to implement stormwater Best Management Practices (BMPs). Properties that have BMPs that manage the first one inch of runoff are eligible to receive credits on their stormwater charges.

More information on our stormwater parcel based charge and credit program can be found at http://www.phila.gov/water/stormwater_billing.html.



Water

Venice Island

The Venice Island Underground Storage Basin project is located between the Manayunk Canal and the Schuylkill River, between the Lock and Cotton Street bridges in the Manayunk neighborhood of Philadelphia. The entire project consists of an underground storage basin, above-ground Pump House and state-of-the-art recreation and performing arts facilities.

The underground storage basin is approximately 400 feet long, 75 feet wide and 25 feet deep and will be capable of storing nearly 4 million gallons of water. The purpose of the storage basin is to temporarily store diverted flow from the sanitary interceptor sewer during intense rain storms.

In addition to the storage tank, there will be a Pump House built, featuring a green roof, in order to pump the stored flow to a treatment facility when the sewer system has available capacity. PWD and Philadelphia Parks and Recreation are also initiating canal improvements to restore flow to the canal. These efforts include dredging and modification to the spillway at Flat Rock Dam.

In order to complete the project, the existing recreation facilities at Venice Island were demolished. The lost amenities will be replaced with state-of-the-art recreation and performing arts facilities. These facilities were designed with community input to ensure that they meet the needs of the surrounding area. By the project's end, all parking will be replaced but with a different configuration that runs the length of the canal from Lock to Cotton Streets.

This \$46 million project is one component of the Philadelphia Water Department's efforts to protect and improve the health of the Schuylkill River, a source of drinking water for the City of Philadelphia. A healthy river provides habitat for plants and animals, supports recreational activities such as boating and fishing, and strengthens communities through the value of natural resources.



Environment

Southwest, Southeast and Northeast Water Pollution Control Plants

In Calendar Year 2010, the Philadelphia Water Department's three Water Pollution Control Plants were selected to receive Peak Performance Awards from the National Association of Clean Water Agencies (NACWA). NACWA's Peak Performance Awards program recognizes member agency facilities for excellence in wastewater treatment as measured by their compliance with their National Pollutant Discharge Elimination System (NPDES) permits.

The Northeast and Southeast Water Pollution Control Plants were recognized with Platinum Awards. Platinum Awards pay special tribute to member agency facilities that have received Gold Awards for five consecutive years. Gold Awards recognize member agency facilities that achieve perfect compliance for an entire calendar year.

The Northeast and Southeast plants have achieved perfect permit compliance for five and 11 years, respectively. Historically high flows in February 2010 contributed to the Southwest Plant receiving a violation for one NPDES parameter, which qualified the plant for a Silver award.





Schuylkill and Delaware River Source Water Protection Plans

The Schuylkill and Delaware River Source Water Protection Plans provide a comprehensive framework for implementing a watershed-wide effort to improve source water quality. The Plans prioritize and outline several approaches to reduce sources of contamination to Philadelphia's raw water supply. PWD has made exceptional progress accomplishing Plan goals, including prioritizing and promoting land for permanent protection; establishing a regional network of organizations, businesses and governments to work together to protect and enhance the Schuylkill River Watershed; supporting policies that preserve forests and emphasize water resource protection; and collaborating with the State of Pennsylvania to ensure regulations are enforced for wastewater treatment plants that discharge upstream of Philadelphia. Much progress has been made addressing threats to our water supply within Philadelphia's own boundaries, including storm drain markings, improved buffers in Fairmount Park, a goose deterrent program and education about proper disposal of unused pharmaceuticals.

During the past year, the Source Water Program has conducted research to continue to improve our knowledge of Philadelphia's water supplies and to help further define priorities for watershed protection. This research includes an analysis of flows needed to protect PWD's Baxter Drinking Water Treatment Plant on the Delaware River from saltwater intrusion; a preliminary analysis of water use availability in the Schuylkill River; monitoring and evaluating natural gas development activity to ensure continued protection of our drinking water supply; developing and implementing an iodine-131 watershed characterization program; and, tracking of major sources of human infectious pathogens such as *Cryptosporidium*. Information from the latter study was used to develop a *Cryptosporidium* Watershed Control Program Plan for the Schuylkill River watershed. The Watershed Control Plan will help ensure PWD compliance with the EPA's Long-Term 2 Enhanced Surface Water Treatment Rule at the Queen Lane Drinking Water Treatment Plant.

In the last year, PWD has also made significant progress toward upgrading, expanding, and improving upon the Delaware Valley Early Warning System (EWS). PWD is currently implementing a 5-year Strategic Plan that identifies improvements and expansions that will enable the EWS to better fulfill its current roles and critical functions, while simultaneously supporting new functions that improve the system's monitoring and notification capabilities.

In May 2011, PWD received grant funding approval under the Delaware Bay Area Maritime Port Security Grant Program, which will further support system improvements.

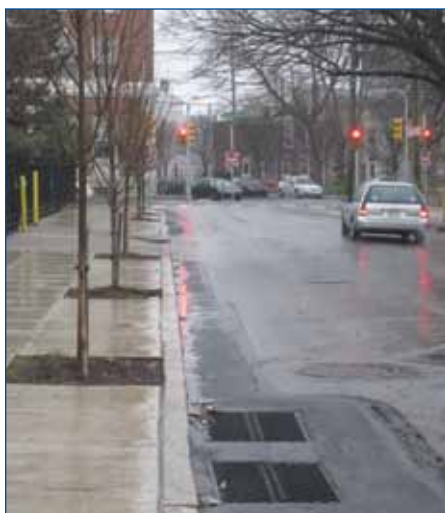
Protection

Contamination Warning System

During 2010 and 2011, the Philadelphia Water Department made extensive progress in designing and implementing a state-of-the-art drinking water contamination warning system under a multi-year, multi-million dollar grant awarded by the Environmental Protection Agency under its Water Security Initiative (WSI). EPA grants were also awarded to the New York City Dept. of Environmental Protection as well as water utilities in Dallas and San Francisco.

The Contamination Warning System focuses on the enhancement of six areas of drinking water security: real-time remote online water quality monitoring; customer complaint surveillance; enhanced security monitoring such as video surveillance; public health surveillance through the Philadelphia Department of Public Health's Disease Control Division; rapid and accurate water quality analysis; and consequence management that will include our relationships with the Office of Emergency Management and Philadelphia's police, fire and related departments and units.

The program has already improved and streamlined customer complaint response and has integrated new systems such as Cityworks, an advanced work order management system. The Contamination Warning System's objectives for enhanced water security are to integrate data, resources and response capabilities; provide timely detection of any potential for water contamination; and protect public health using currently available and well-characterized technologies. All of this will be done in a sustainable way, taking advantage of dual-use benefits. Philadelphia's progress and successes are already being featured nationally through the EPA and at national conferences and in publications.





Geographic Information Systems

The full-scale conversion of City-wide water and sewer assets into a Geographic Information System (GIS) database has been completed, and we continue to maintain and operate this system. The database spatially displays our infrastructure and links it to operations, maintenance, engineering and construction data.

Using GIS, we have converted all of our existing plans and specifications for all City-wide water and sewer assets into a much more manageable electronic information management system.

Quick access to utility infrastructure data through GIS allows us to make timely management decisions, increasing productivity and reducing risk.

The GIS database is a key component of our new work order/asset management system, CityWorks Server. As part of the first phase of implementation, a select number of operational units began using the system. The second-phase is scheduled to be implemented during the fourth quarter of 2012. With the implementation of Phase 2, the bulk of the “streetside” of our business will be using CityWorks Server. Phase 3 implementation should be completed in the third quarter of FY2013 and will essentially leverage information systems to provide enhanced reports. CityWorks Server will replace and consolidate many outdated legacy systems. Work orders and service requests will be linked to a GIS feature in the database that will allow us to spatially track all aspects of our field operations and maintenance.

Water Main Replacement

There is annual dedicated funding in place for the renewal of our water and wastewater distribution and collector system. This renewal program has been in place for over 30 years and has resulted in our current level of 221 breaks per 1,000 miles of water main compared to the national average of 270 breaks per 1,000 miles.

By reducing the emergency repairs required, we are better able to manage our crews and other resources, and continually provide better service to our customers. We also closely monitor the physical condition of our infrastructure to determine that the capital investment provided is adequate to ensure the integrity of the water supply distribution and collector systems.

Management

Sewer Assessment Program

The Philadelphia Water Department is responsible for a wastewater and stormwater collection system that includes nearly 3,600 miles of sewers. The system is composed of sanitary, combined and storm sewers ranging in diameters from 8 inches to 22 feet. Most of these sewers are constructed of brick, concrete, terra cotta or vitrified clay pipe and are circular, box or egg shaped. PWD has developed and pilot-tested the Sewer Assessment Program (SAP) and this program has become an ongoing part of the Department's capital improvement, operations and maintenance efforts.

The SAP is a systematic methodology used to:

- inspect and evaluate the sewers within the PWD wastewater collection system
- capture and analyze the resulting information in computerized databases
- apply a uniform protocol to prioritizing sewers for repair and replacement

As part of the development of the SAP, PWD's collection system staff was trained in inspection and evaluation techniques using industry standard methods and state-of-the-art techniques and equipment. The development of an electronic database and the handling of very substantive quantities of data, has also been an integral part of the SAP. The databases that were generated are currently integrated into PWD's GIS system. In its current form, the SAP serves as an evaluation and project prioritization technique for improvements to be made to the sewer collection system.



Public Education



The Fairmount Water Works, a National Historic Landmark, once served as the City's second pumping station (1815 to 1909), providing water to the citizens of Philadelphia.

This magnificent landmark has been transformed into an exciting watershed education center. Through a variety of educational programs, interactive exhibits and authentic experiences, the Fairmount Water Works Interpretive Center (FWWIC) informs the public about Philadelphia's water resources and its role in protecting them.

The historic Fairmount Water Works is part of the Interpretive Center experience – the original buildings surround today's modern exhibits. Visitors can experience the flowing Schuylkill River from this unique vantage point – right at river's edge.

From billstuffers and brochures to our Water Quality Report and the Fairmount Water Works Interpretive Center, our Public Education and Outreach staff works to provide educational information to our customers of all ages. Please visit our website, www.fairmountwaterworks.org, for more information about our exhibits and programs. We also invite you to Like us on Facebook, and to follow us on Twitter at @FWWIC.

Over the past eight years, the FWWIC has become the region's premier ecotourism center and is recognized by the Pennsylvania Department of Environmental Protection as The Delaware River Basin's Official Watershed Education Center and as a Gateway Center for the Schuylkill River National and State Heritage Area. With more than 300,000 visitors to date, the Fairmount Water Works Interpretive Center has become the destination for innovative water and watershed education programming in the Delaware Valley.

Water in Our World is the overarching theme that unites the exhibits at the Fairmount Water Works Interpretive Center. Through the use of both high-tech interactive exhibits and user friendly exhibits, visitors are engaged in learning about the many fascinating aspects of water:

- View an award-winning film that tells the story of the Fairmount Water Works history;
- Fly on a virtual helicopter ride up the Delaware Bay to the headwaters of the Delaware and Schuylkill Rivers and learning how our activities on the land affect water quality;
- Witness a simulation of the rise and fall of tides in the Schuylkill River with an actual working model of the Fairmount Water Works;
- Go outside to cast a discerning eye at the river and calculate where the river is in the tidal cycle and collect a sample of river water;
- Experience Seeing is Believing in the FWWIC's state-of-the-art Water Lab where you can observe the teeming "unseen" life in a water sample at 400 times magnification;
- Visit Pollutionopolis, America's dirtiest City;
- Follow a flush through the City's sewer system;
- Make rain fall and seeing the affects of rainfall on the watershed; and
- View fish and animals migrating up the Schuylkill River via a television camera installed in the Fairmount Dam Fishway Facility located on the riverbank opposite the Interpretive Center.

and Outreach

School Programs Include:

Where can students go to learn about one of the most important issues of the 21st century? Students of all ages come to learn about water through these many exciting lessons.

- Water In Our World
- Land and Water: A Delicate Balance
- From Street to Stream: Slow the Flow
- Building as Machine: Water for the City
- Seeing is Believing: A Drop in the Bucket
- New! Green City, Clean Waters: Following Nature's Lead
- Global Water Action: Engineering a 21st Century Solution

Public Programs:

Schuylkill Soundings speaker series and public forums the third Thursday of every month from 5:30 to 7:00 pm. Lively and thought-provoking topics featuring artists, writers and environmental professionals who share our passion for water.

Sunday film series featuring documentaries on global water issues, infrastructure, water resources, climate change and other timely and sometimes controversial themes

Architectural Walking and Bus Tours: Sunday afternoon tours led by seasoned Philadelphia Tour Developer Ken Hinde. (fee based)

Special tours: We offer a variety of themed programs for Questors, Alumni organizations, tour groups, engineering and public health professionals and other organizations. (fee based)

Family Programs:

Science Saturdays are fun hands-on activities that meld science and art in our laboratory. We test water, explore the wondrous beauty of diatoms, identify leaves and more. Open to all ages every Saturday afternoon from 2:00 to 4:00 pm.

Lifelong Learning:

To engage our adult audience, we offer guided group tours of both the historic Fairmount Water Works and the Interpretive Center's exhibits.

On an annual basis, we celebrate the United Nations' World Water Day, Earth Day, Drinking Water Week and the Spring Shad Run. In addition, our collaboration with the Mayor's Office of Sustainability is helping Philadelphia reach its goal of being the nation's greenest City.

Visit Us Soon!

The Interpretive Center is located at 640 Water Works Drive, below the Art Museum. Hours are Tuesday through Saturday, 10:00 am to 5:00 pm, and Sunday from 1:00 pm to 5:00 pm. Closed on Mondays and City holidays. Admission is free.

Support our educational efforts! Make a donation to "The Fund for the Water Works—IC"

The Center is ADA accessible. To schedule classroom tours or to check out the Center's Saturday Family Programs, Sunday Film Series, Schuylkill Soundings offering, visit our website: www.fairmountwaterworks.org.

Management Discussion and Analysis

The City of Philadelphia Water Department Management Discussion and Analysis

The Water Department was established by the City pursuant to the City's Home Rule Charter with the power and duty to operate, maintain, repair and improve the Water and Wastewater Systems. The Charter requires the Water Department to fix and regulate rates and charges for supplying water and for wastewater treatment service in accordance with standards established by City Council. Such standards must enable the City to realize from rates and charges an amount at least equal to operating expenses and debt service charges on any debt incurred or to be incurred for the Water and Wastewater Systems, and proportionate charges for all services performed for the Water Department by all officers, departments, boards or commissions of the City. The Charter also authorizes the Water Department, with the authorization of City Council, to enter into contracts for supplying water service and sewer and sewage disposal service to users outside the limits of the City.

The operations of the Water Department are accounted for in the Water Fund, which is an Enterprise Fund of the City. The Water Fund is an accounting convention established pursuant to the Charter for the purpose of accounting for the assets, liabilities, revenues, expenses and Rate Covenant compliance on a legally enacted basis for the Water and Wastewater Systems. The Water and Wastewater Funds are funds required by the 1993 General Water Revenue Bond Ordinance to be established and maintained with the Fiscal Agent for so long as the Revenue Bonds authorized under the ordinance are outstanding. Under the ordinance, Water Fund Bond proceeds and Project Revenues must be segregated from other funds of the City.

The Philadelphia Water Department is a municipal utility serving the citizens of the Philadelphia region by providing integrated water, wastewater and stormwater services. The utility's primary mission is to plan for, operate and maintain both the infrastructure and the organization necessary to purvey high-quality drinking water, to provide an adequate and reliable water supply for all household, commercial and community needs, and to sustain and enhance the region's watersheds and quality of life by managing wastewater and stormwater effectively.

The Water Department, which began water system service in 1801, supplies water to the City and a portion of each of Montgomery, Delaware and Bucks Counties, Pennsylvania, and wastewater service to the City and to ten municipalities and authorities located in Montgomery, Delaware and Bucks Counties, Pennsylvania. The population served by the water system was approximately 1,738,000 as of the 2010 census, of which 1,526,000 were in the City, 155,000 were in Bucks County and approximately 57,000 in Montgomery and Delaware Counties. The population served by the wastewater system was approximately 2,283,000 as of the 2010 census, of which 1,526,000 were in the City and 757,000 were in the suburbs.

Administration

The Water Department is managed by a Commissioner appointed by the Managing Director of the City with the approval of the Mayor. The Commissioner appoints deputies with the approval of the City's Managing Director; substantially all other employees of the Water Department are appointed under the provisions of the City's Civil Service Regulations.

The City's Department of Revenue performs all functions relating to meter reading, customer accounts and collections for the Water Department through the Water Revenue Bureau. The Department of Revenue and the Water Revenue Bureau are under the direction of the Director of Finance. The Director of Finance, as the chief financial, accounting and budget officer of the City, has overall responsibility for the fiscal administration of all City departments, including the Water Department. Audits of all City departments, including the Water Department, are performed annually by the Office of the City Controller. The Law Department of the City, headed by the City Solicitor, handles all legal matters affecting the Water Department.

Water and Wastewater Systems

The water and wastewater systems of Philadelphia are owned by the City and operated by the City's Water Department. The water system provides water to the City (130 square mile service area), to Aqua Pennsylvania, Inc., formerly Philadelphia Suburban Water Company, and to the Bucks County Water and Sewer Authority. The City obtains approximately 58% of its water from the Delaware River and the balance from the Schuylkill River. The water system serves approximately 476,100 accounts through 3,159 miles of mains, three water treatment plants and 15 pumping stations, and provides fire protection through more than 25,200 fire hydrants.

The wastewater system services a total of 360 square miles of which 130 square miles are within the City and 230 square miles are in suburban areas. The total number of accounts is approximately 478,900. The wastewater and stormwater systems contain three water pollution control plants, a biosolids processing facility, 17 pumping stations, and approximately 3,657 miles of sewers. Based on its current NPDES discharge permit, the City is required to achieve effluent limitations that are considered more stringent than those required to achieve secondary treatment levels as defined in the Federal Water Pollution Control Act, as amended.

PWD's three water treatment plants deliver approximately 245 million gallons of top quality drinking water each day. The Department performs more than 350,000 tests annually at these plants to ensure consistent, optimal treatment and a healthy water supply. In addition, thousands of samples of tap water are analyzed annually at the Department's state-of-the-art testing laboratory. These samples are collected from City reservoirs and from more than 65 locations throughout the Philadelphia area. PWD also monitors water flows and pressures at 40 locations throughout the City.

The Department also treats wastewater at its three water pollution control plants. These plants treat approximately 432 million gallons of wastewater per day that meet or exceed

Federal and State standards, protecting and preserving our precious waterways. The Philadelphia Water Department also operates a central laboratory facility and a range of technical and administrative support services.

The management of the Water Department has prepared this narrative overview and analysis of the financial statements of the City of Philadelphia, Pennsylvania Water Fund, for the fiscal year. The information presented here should be read in conjunction with the financial statements immediately following the discussion and analysis.

Financial Highlights

The Water Department met its bond coverage ratios for the year with a revenue bond coverage ratio of 1.20, a total debt service coverage ratio of 1.09 and a net operating revenue bond coverage ratio of 1.26 prior to the deduction of the transfer to the Rate Stabilization Fund.

At the end of the current fiscal year, the Water Fund's net assets totaled \$778.0 million resulting from an excess of its assets over its liabilities; its unrestricted net assets showed a balance of \$147.8 million.

The Water Fund's net assets showed an increase of \$22.8 million during the current fiscal year compared with \$39.3 million for the prior fiscal year.

Net Assets

As noted earlier, net assets are useful indicators of a government's financial position. At the close of the current fiscal year, the Water Department's assets exceeded its liabilities by \$778.0 million.

Capital assets, such as land, buildings, meters, water mains and sewer lines, less any outstanding debt issued to acquire these assets, comprise \$254.8 million of the Water Department's net assets. Although these capital assets assist in providing services to our customers, they are generally not available to fund the operations of future periods.

In addition, a portion of the Department's net assets, \$375.4 million is subject to external restrictions as to use. The remaining component of net assets is the unrestricted net assets, which ended the fiscal year with \$147.8 million.

Bond Issuance

On August 4, 2010, PWD settled on \$185,000,000 in new money revenue bonds. The bonds were issued as the City of Philadelphia, Pennsylvania-Water and Wastewater Revenue Bonds, Series 2010C. The net proceeds of \$170.5 million from these bonds will be used to fund a portion of the Water Department's 2011 to 2016 Capital budget and to pay costs related to the transaction. The City also terminated the two forward-starting 2007 Swap agreements as further described in the forepart of the Official Statement for this transaction. The bonds were issued at true interest cost of 4.373226%. The final bond maturity is in 2040 and has a yield of 4.884%. The 2010C issue was insured by AGM. The financing included the termination of the Wachovia Bank (now Wells Fargo) forward-starting Swap agreement on July 27, 2010, which

resulted in a termination payment of \$15,015,000 which was funded with proceeds of the 2010C bonds and will be amortized over the life of these bonds for GAAP accounting purposes.

During Fiscal Year 2011, Pennvest loan number 75235 (series 2010B) completed the final settlement with the Authority. The maximum loan amount is \$30,000,000. Estimated project costs are currently \$30,000,000. No Project draws have been requested or received through June 30, 2011.

Additional debt service for these loans has been included in the Department's Fiscal Year 2011 budget, the Department's five-year plan projections and the Engineering Report. The Pennvest loans are being provided on an "interest-only" basis during the construction period of up to three years, after which they are amortized on a 20-year basis at 1.193% for the first five years and 2.107% for the next 15 years. The Pennvest loans were authorized through a supplemental ordinance to the Restated General Ordinance (the Twelfth Supplemental Water Bond Ordinance No. 090321).

Termination of Rate Lock (Swap) Agreement

In February, 2007 the City entered into a "rate lock" agreement with two counterparties for a \$180,000,000 portion of certain bonds.

Each of the Swap Agreements was terminated prior to its stated termination date. The Merrill Lynch agreement was terminated in Fiscal Year 2010 and a termination fee of \$15.2 million was paid from the Water operating account. The Wachovia Bank (now Wells Fargo Bank) agreement was terminated on July 27, 2010 in connection with the issuance of the 2010C Bonds.

Authorized and Unissued Bonds:

The Department was authorized for the issuance of \$135,000,000 in additional new money bonds under the 12th supplemental ordinance (no. 090321). These bonds were issued as part of the 2011B Series Water and Wastewater Revenue Bonds in November 2011.

During Fiscal Year 2011, the Department also received additional authorization for up to \$450,000,000 in additional new money bonds under the 14th supplemental ordinance (no. 110375). The current capital spending plan calls for the issuance of these bonds in early FY 2014. The Department was also authorized to refinance up to \$240,000,000 in existing Water Revenue Bonds under the 13th supplemental ordinance (no. 110376).

Pennvest Loans

During Fiscal Years 2009 and 2010, the Water Department settled on several new Pennvest (the Pennsylvania State Infrastructure Financing Authority) Loans.

These loans are more fully described in the "Pennvest Loans" section of the footnotes attached to the financial statements.

Subsequent Financing Events

On November 16, 2011, PWD settled on \$184,855,000 in new money and refunding revenue bonds. The bonds were issued as the City of Philadelphia, Pennsylvania-Water and Wastewater Revenue Bonds, Series 2011A and Water and Wastewater Revenue Refunding Bonds, Series 2011B.

This transaction is more fully described in the "Subsequent Events" section of the footnotes attached to the financial statements.

Water and Wastewater Rates

In terms of rates, the Philadelphia Water Department continues to have some of the lowest rates in the region for water, wastewater and stormwater services. The Department has had great success in containing costs, increasing employee productivity and improving services. The Department has initiated numerous measures to improve service, reduce costs and enhance revenues over the past decade. The cost of operating the wastewater facilities has been reduced. The refinancing of more than \$2 billion in revenue bonds has resulted in a cumulative net present value savings in excess of \$78 million in debt service expense. A Revenue Protection Unit created in Fiscal Year 2000 has recovered more than \$20 million in previously unbilled revenue to date. The Department has steadily improved the credit rating of the revenue bonds. All seven of the major plant facilities have been winning national performance awards on an annual basis.

Beginning July 1, 2010, a typical residential customer's bill increased by an additional \$3.20 a month, for a total monthly bill of \$59.44. This change was for the period of July 1, 2010 to June 30, 2011. A typical senior citizen's monthly bill increased by an additional \$1.88, or a total monthly bill of \$36.91, for those seniors who qualify for the Department's 25% senior citizen discount. The income test to qualify for this discount was increased to \$29,700 on July 1, 2010. In addition, the Department has adopted rate changes to be phased in for Fiscal Year 2012. These changes include:

- \$3.49 increase in the typical monthly bill (total monthly bill \$62.93) from July 1, 2011 to June 30, 2012.

Unlike many neighboring communities where sewer bills are separate from water bills or assessed through an annual charge, Philadelphians receive a bill that combines water, wastewater and stormwater charges. Unfortunately, this combined billing sometimes leads to the impression that our water rates are high. In fact, even with the most recent revisions to rates, Philadelphia's water and sewer charges continue to be among the lowest in the region.

As shown on the following table, PWD's water rates are less than half those charged by many neighboring investor-owned utilities.

| 2011 Regional Residential* Water and Sewer Charges | | |
|---|--------------------|--------------------|
| | Monthly Water Bill | Monthly Sewer Bill |
| Aqua Pennsylvania+ | \$53.61 | N/A |
| Pennsylvania American Water+ | \$54.60 | N/A |
| New Jersey American Water+ | \$35.59 | N/A |
| North Penn Water Authority+ | \$22.59 | N/A |
| North Wales Water Authority+ | \$20.16 | N/A |
| Doylestown Township | \$27.98 | \$38.75 |
| Lower Gwynedd Municipal Authority** | N/A | \$29.23 |
| CCMUA (Camden County)** | N/A | \$26.25 |
| Trenton | \$28.11 | \$25.57 |
| Philadelphia Water Department | \$26.08 | \$17.69 |
| Rates in effect on November 14, 2011. Stormwater charges (\$13.66) are excluded from sewer calculations because many jurisdictions fund such services from the general tax base or a separate utility assessment. | | |
| * Calculations based on 4,488 gallons/month (600 cu.ft.) | | |
| ** Sewer-only utility | | |
| + Water-only utility | | |
| Source: Philadelphia Water Department | | |

Historical Rates

The table below shows monthly water and sewer rates, based, in each case, on a typical customer with a 5/8-inch meter using 700 cubic feet or 5,236 gallons monthly.

| Philadelphia Water Department Monthly Water and Sewer Rate Charges | | | | |
|--|---------|---------|---------|---------------------|
| EFFECTIVE DATE | WATER | SEWER | TOTAL | PERCENTAGE INCREASE |
| 07/01/1993 | \$10.61 | \$23.52 | \$34.13 | N/A |
| 07/01/1994 | 10.86 | 24.06 | 34.92 | 2.3% |
| 07/01/1995 | 11.20 | 24.80 | 36.00 | 3.1 |
| 09/04/2001 | 12.16 | 24.77 | 36.93 | 2.6 |
| 07/01/2002 | 13.75 | 24.48 | 38.23 | 3.5 |
| 07/01/2003 | 15.06 | 23.60 | 38.66 | 1.1 |
| 02/01/2005 | 17.63 | 25.94 | 43.57 | 12.7 |
| 08/01/2005 | 18.06 | 26.32 | 44.38 | 1.9 |
| 07/01/2006 | 19.41 | 27.94 | 47.35 | 6.7 |
| 07/01/2007 | 20.36 | 28.99 | 49.35 | 4.2 |
| 11/01/2008 | 22.29 | 30.55 | 52.84 | 7.1 |
| 07/01/2009 | 24.56 | 31.68 | 56.24 | 6.4 |
| 07/01/2010 | 26.84 | 32.60 | 59.44 | 5.7 |
| 07/01/2011 | 29.37 | 33.57 | 62.94 | 5.9 |

Bond Ratings

As of the close of the current fiscal year, Moody's, Standard & Poor's and Fitch rate the City and its Enterprise Fund Bonds as follows:

| City of Philadelphia's Bond Ratings General Obligation and Revenue Bonds | | | |
|---|----------------------------------|-------------------------------------|---------------|
| | Moody's Investor's Service | Standard & Poor's Corporation | Fitch IBCA |
| General Obligation Bonds | A2 | BBB | A- |
| Water & Sewer Revenue Bonds | A1 | A | A+ |
| Aviation Revenue Bonds | A2 | A+ | A |

The ratings of the Water and Wastewater Revenue Bonds are more fully described in the "Bond Ratings" section of the footnotes, attached to the financial statements.

Fund Balances

During FY 2011, the Department deposited \$10.9 million from its Rate Stabilization Fund, bringing the cumulative fund balance to approximately \$157.1 million, all of which is available to provide necessary working capital to the Department and to offset future rate increases. In addition, approximately \$17.5 million was transferred to the Residual Fund. These funds will be used to provide capital funding to reduce the amount of additional bond issues to fund the capital program. To date, the Department has transferred in excess of \$289.4 million to its capital fund via its annual 1% transfer and \$87.4 million via additional discretionary transfers to Capital Fund from its Residual Fund.

Maintaining excellence in water purity standards

Philadelphia's drinking water meets or surpasses the requirements of State and Federal standards 100 percent of the time. Since voluntarily joining the U.S. Environmental Protection Agency's (EPA) Partnership for Safe Water (PFSW) in 1996 (a joint program

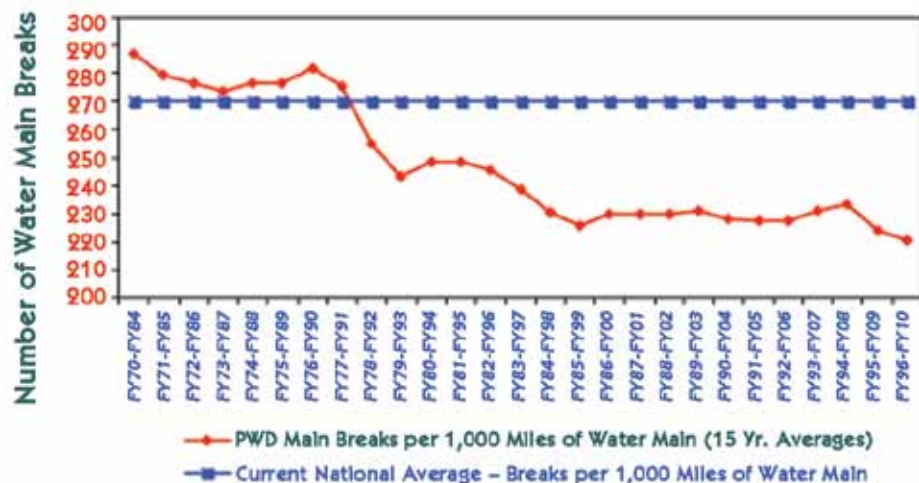
of the EPA and the water industry), PWD has committed itself to reduced "turbidity," an industry standard measure of water purity. In FY10, the turbidity of Philadelphia's water (.05 ntu) was 83% lower than the amount required by State and Federal regulations and 50% lower than the Partnership's turbidity goal of 0.1 ntu. Nationally, the Philadelphia Water Department's three water treatment plants are among an elite group of 31 facilities that have received the Director's Award from the Partnership for Safe Water for meeting the Partnership goals for 10 consecutive years. To put this in perspective, there are over 400 water treatment plants enrolled in the PFSW and there are over 4,700 water utilities nationwide.

Optimize Water and Sewer Main Replacement

PWD closely monitors water main conditions to ensure that adequate capital investment is made, the integrity of the water supply system is sustained, and the occurrence of disruptive and costly water main breaks is reduced.

As shown in the following chart, PWD's FY96-FY10 fifteen-year moving average level of 221 breaks per 1,000 miles is less than the national average of 270 breaks per 1,000 miles, and is the lowest level in more than 20 years.

Main Breaks per 1,000 Miles of Water Main



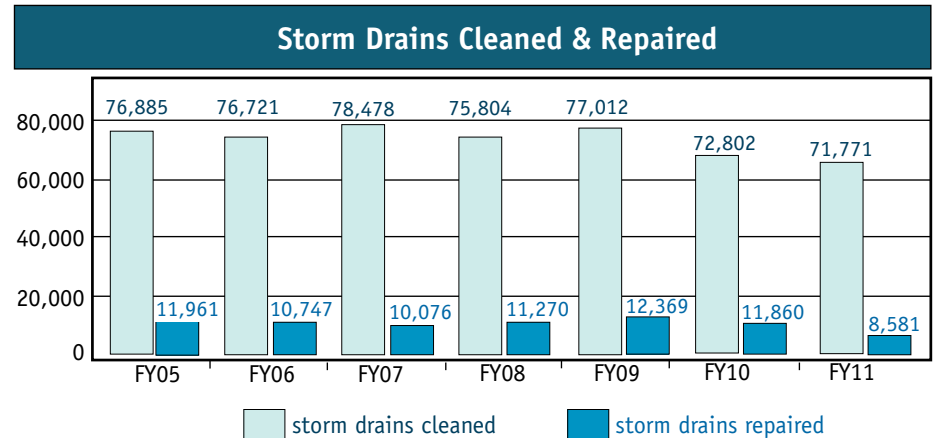
Reducing Unbilled or Non-Revenue Water

PWD maintains programs to reduce uncaptured revenue and loss of treated water from the distribution system. Over the past 16 years, PWD has cut non-revenue water by over 40 percent, from 133 million gallons per day (mgd) to 79 mgd at the close of FY2010. PWD continued a number of successful loss control initiatives in FY2010, including a leak detection and repair program that surveyed 1,133 miles of pipeline for leaks, and abated over 28 mgd of leakage, representing a cost savings of over \$1,665,000. In FY2009 PWD completed the 3-year pilot phase of its first permanent District Metered Area (DMA) which includes pressure control features to reduce the occurrence of leakage and water main breaks. The results of this project have been impressive, saving over one million gallons of water per day for an annual savings of \$55,000 with full payback projected by 2013.

PWD is now considering applying this approach to the former Philadelphia Naval Shipyard site as it assumes operation and maintenance of the water and wastewater infrastructure in this area. PWD is also one of the few water utilities in the United States employing inline leak detection services on its large-diameter transmission pipelines as a strategy to detect leaks before they become catastrophic ruptures. Through October 2010 a total of 63 leaks on almost 30 miles of large pipelines have been identified and most have been repaired. In addition, the PWD's Revenue Protection Program continued to recover uncaptured revenue from billing errors, lost customer accounts and unauthorized consumption. This program has recovered \$23.4 million since its inception in 2000. Going forward, water loss control activities are keying on investigation of customer meter application and accuracy for large commercial and industrial customers, which, while small in number, account for a relatively large portion of the water consumed in the City of Philadelphia.

Improved stormwater flood control

PWD's management of the stormwater system is an important multi-faceted service for both flood control and environmental protection. With approximately 79,500 storm drains to maintain, the Department focuses on keeping them in good condition to prevent blockage of stormwater flow and creation of hazardous



conditions for pedestrians. In FY11, PWD cleaned 71,771 storm drains. In addition, the Department reconstructed 8,581 storm drains. As shown on the above chart, PWD has maintained a high level of performance in these two important areas, and aims to clean each storm drain at least once per year.

In January 2006, PWD initiated new Stormwater Regulations. The new regulations are an important tool in the City's efforts to reduce flooding and to protect our rivers and streams. Accordingly, all development projects that disturb more than 15,000 square feet of earth must comply with water quality and non-structural site design requirements that are consistent with State and Federal stormwater best management practices. During FY11, PWD reviewed and approved plans for developments accounting for 285 acres. As a result of the stormwater controls for these projects, flows will be reduced by 252 million gallons per year. Stormwater regulations include four major components: water quality protection, channel protection, flood control and non-structural site design (minimizing impervious land cover). The results of this program since inception have been significant. The program has approved over 1,700 acres of proposed development. Based on this area, approximately 1.7 billion gallons of stormwater runoff is managed annually, reducing excess burden and stress on the City's stormwater infrastructure and treatment plants.

Sinking Fund Reserve Substitution

In late November, 2007, a partial substitution in the amount of \$67 million was completed. AGM was contracted to provide the surety policy. At that time the transaction costs were paid and the balance of the funds (\$64,325,000) was deposited into the Residual Fund-Special Water Infrastructure Account as required by the Ordinance. No provision was included in either the Fiscal Year 2009 or Fiscal Year 2010 Water Fund budget for additional substitutions.

As part of the New River City program, the Water Department executed a program agreement with PAID to provide program management and oversight. To date, eight asset acquisition agreements totaling \$83,697,833 have been executed (actual disbursements will be limited to the \$64,325,000 in currently available funding and may be supplemented with the "Pennworks" grant/loan discussed herein). Four of the eight projects are substantially completed; final disbursement has been made on two of these, and the other two are in process. The other four projects are underway and are expected to be completed within the next 12 months. As described in a preceding section, the transfer of the water and sewer utilities at PNBC from PAID to

the Water Department, including the projects outlined above, occurred in November, 2009.

Approximately \$23.9 million was paid to PIDC during FY 2011 for this project.

Bond Insurance Ratings

On November 21, 2008, Moody's Investor's Service Inc. ("Moody's") reduced the Aaa insurance financial strength of FSA and its affiliated insurance operating companies to Aa3 with developing outlook. An explanation of the significance of any rating action should be obtained from the rating agency furnishing same.

FSA currently meets the credit rating requirements prescribed by the General Ordinance with respect to eligible providers of supply policies for deposit in the Debt Reserve Account. The City and the Water Department are monitoring the financial condition and ratings of FSA in relation to such credit quality requirement, and are considering all options currently available to ensure continued compliance in this respect.

Protecting Drinking Water Supplies

PWD is the owner and operator of the highly renowned Delaware Valley Early Warning System (EWS). The EWS is an integrated monitoring, notification and communication system designed to provide advanced warning of surface water contamination events in the Schuylkill and lower Delaware River watersheds.

The EWS is comprised of 4 principal components; the EWS Partnership, the notification system, the monitoring network, and the web-based database and portal. The EWS Partnership consists of stakeholders, which include representatives from both public and private drinking water treatment plants in the coverage area, industries who withdraw water from the Schuylkill and Delaware rivers for daily operations, the Federal government, and representatives of State government agencies from both PA and NJ. The notification system contains both automated telephone notification and web-based notification capabilities.

In order to further strengthen the monitoring and notification capabilities of the EWS, PWD recently implemented several system enhancements, including the integration of industrial users into the EWS Partnership, development of a Spill Model Analysis Tool for EWS users, and the addition of a stream designation component to the EWS telephony application. PWD is also currently implementing a 5-year Strategic Plan for the EWS. The recently developed EWS Strategic Plan identifies improvements and expansions that will enable the EWS to better fulfill its current roles and critical functions, while simultaneously supporting new functions that improve the system's monitoring and notification capabilities. In May 2011, PWD received grant funding approval under the Delaware Bay Area Maritime Port Security Grant Program. The funding will

be used to implement an EWS Tidal Spill Trajectory Tool to accurately predict the movement of chemical, biological and radiological agents that might be discharged in the lower Delaware River and travel under tidal influence. The grant project will also enhance and upgrade GIS mapping technologies used by the EWS.

As of December 2011, the EWS consists of 50 partner organizations with 279 individual members. During 2011, there were a total of 31 water quality events reported to the EWS. Operation, maintenance and development costs during this period totaled approximately \$350,000 and income from user fees totaled approximately \$77,000.

Long-Term Control Plan for Combined Sewer Overflows

During heavy rainstorms, the release of some stormwater and sewage overflows from combined sewers (sewers that carry stormwater and sanitary waste in one pipe) to the City's rivers and streams, causes pollution to these waterways. In 1997, PWD submitted its Combined Sewer Overflow Long-Term Control Plan (CSOLTCP) to the PA Department of Environmental Protection. These plans included the incorporation of Nine Minimum Controls (NMCs) – using industry accepted best practices to efficiently operate and maintain our sewer system, in addition to the identification of \$48 million of capital improvement projects that would ensure localized capture and storage of wet weather flows within the existing sewer collection system.

These efforts successfully reduced overflow volume by three percent or six billion gallons a year. Initial efforts were focused on detecting and eliminating overflows during dry weather, getting the most storage possible in our sewer system, and stepping up inspections and monitoring at sites where overflows occur.

The final component of the CSOLTCP embraces the development of regional watershed partnerships committed to the development of Integrated Watershed Management Plans (IWMPs). These plans are guided by a 20-year vision to restore our region's waterways to fishable, swimmable and beautiful rivers and streams that are life sustaining and are an amenity to our communities. In FY11 the PWD's *Green City, Clean Waters* proposal received approval from the Pennsylvania Department of Environmental Protection (PADEP) for a combined sewer overflow (CSO), long-term control plan (LTCP) that will reduce CSOs by 85%. The 25-year, \$2.5-billion LTCP highlights the innovative use of green and sustainable infrastructure to accomplish this goal.

In September 2009, the Philadelphia Water Department released its *Green City, Clean Waters* plan for meeting its CSOLTCP to meet its regulatory obligations while also looking to ensure that investments in the stormwater

system also help to revitalize Philadelphia environmentally. The Department determined that a green stormwater management infrastructure approach would provide maximum return in environmental, economic and social benefits within the most efficient timeframe. Green stormwater infrastructure includes: planters, rain barrels, green roofs, permeable pavements, an enhanced network of street trees and restored creek corridors. Over the next five years, PWD will lay the foundation for achieving the *Green City, Clean Waters* vision over the full 25-year implementation period of this plan and beyond, moving from a planning to an implementation stage for this program.

Waterways Restoration Program

During Fiscal Year 2004, PWD created the Waterways Restoration Team (WRT), which consists of four crews devoted to removing trash and large debris from the streams and tributaries that define our neighborhoods. The teams also perform restoration work around PWD's storm and combined sewer outfalls and streambanks that contain exposed infrastructure. In addition, these teams maintain a number of green infrastructure Best Management Practices (BMPs) that have been installed by PWD and are recognized as a component of the Department's sewer collection system. In FY08, the teams removed 346 tons of debris including 41 cars, 1,969 tires and 83 shopping carts from Philadelphia's streams. In FY09, 658 tons of debris were removed; in FY10, 1,437 tons were removed; and in FY11, 748 tons were removed. A large component of the team's mission is to work in partnership with the Parks and Recreation Department to restore tributaries and streams that have been significantly damaged over decades by the volume and velocity of flows from sewer outfalls and from the forces of stormwater runoff.

Awards and Recognition

In calendar year 2011, the Philadelphia Water Department's three Water Pollution Control Plants were selected to receive two Platinum and one Gold Peak Performance Award from the National Association of Clean Water Agencies (NACWA). The Southwest Water Pollution Control Plant received a Gold Peak Performance Award for a year of perfect permit compliance, the Southeast Water Pollution Control Plant received a Platinum Peak Performance Award for 11 years of perfect permit compliance, and the Northeast Water Pollution Control Plant received a Platinum Peak Performance Award for 6 years of perfect compliance. NACWA's Peak Performance Awards program recognizes member agency facilities for excellence in wastewater treatment as measured by their compliance with their National Pollutant Discharge Elimination System (NPDES) permits. Gold Awards honor treatment plants that have achieved 100% compliance for an entire calendar year.

Platinum Awards pay special tribute to member agency facilities that have received Gold Awards for five consecutive years.

PWD received the EPA's Watershed Protection Award for its comprehensive source water protection program and continues to set a national model for regional watershed partnerships, waterways monitoring and the Early Warning System for spill and accident alerts and response.

PWD received top honors as the national leader in green infrastructure. *Rooftops To Rivers II*, a report released in November 2011 by the Natural Resources Defense Council, assessed the green infrastructure solutions undertaken by 14 cities in the U.S. and Canada. Only Philadelphia received a perfect score, meeting all six criteria for the environmental action group's "Emerald City" rating.

PWD's three drinking water treatment plants have consistently received the EPA's Partnership for Safe Drinking Water awards for providing drinking water at purity standards higher than required by Federal law.

Requests for Information

This financial report is designed to provide a general overview of the City of Philadelphia Water Department's finances for all interested parties. Questions concerning any of the information provided in this report, or requests for additional information, should be addressed to the Philadelphia Water Department, Finance Division, Aramark Tower, 5th Floor, 1101 Market Street, Philadelphia, PA 19107.



STATEMENT OF NET ASSETS, JUNE 30, 2011 AND 2010

(amounts in thousands)

| | 2011 | 2010 |
|---|------------------|------------------|
| ASSETS | | |
| Current Assets: | | |
| Cash on Deposit and on Hand | \$ 30 | \$ 30 |
| Equity in Treasurer's Account | 60,964 | 69,795 |
| Due from Other Governments | 230 | 373 |
| Accounts Receivable | 236,642 | 225,170 |
| Allowance for Doubtful Accounts | (105,138) | (90,980) |
| Inventories | 13,192 | 12,913 |
| Prepaid Insurance – Surety Bond | -- | -- |
| Total Current Assets | 205,920 | 217,301 |
| Noncurrent Assets: | | |
| Restricted Assets: | | |
| Equity in Treasurer's Account | 406,402 | 290,282 |
| Sinking Funds and Reserves | 130,299 | 117,852 |
| Grants for Capital Purposes | -- | -- |
| Deferred Outflow–Financial Instruments | 12,519 | 29,227 |
| Receivables | 952 | 898 |
| Total Restricted Assets | 550,172 | 438,259 |
| Net Pension Asset | -- | 17,371 |
| Capital Assets: | | |
| Land | 5,919 | 5,919 |
| Infrastructure | 2,055,254 | 1,983,922 |
| Construction in Progress | 270,769 | 204,591 |
| Buildings and Equipment | 1,514,322 | 1,497,507 |
| Accumulated Depreciation | (1,959,538) | (1,880,592) |
| Total Capital Assets | 1,886,726 | 1,811,347 |
| Total Noncurrent Assets | 2,436,898 | 2,266,977 |
| Total Assets | 2,642,818 | 2,484,278 |
| LIABILITIES | | |
| Current Liabilities: | | |
| Vouchers Payable | 7,529 | 25,043 |
| Accounts Payable | 8,080 | 8,388 |
| Salaries & Wages Payable | 4,044 | 3,641 |
| Construction Contracts Payable | 23,096 | 33,113 |
| Accrued Expenses | 22,465 | 19,292 |
| Deferred Revenue | 9,764 | 8,016 |
| Funds Held in Escrow | 1,906 | -- |
| Current Portion of Long-Term Obligations | 109,942 | 102,862 |
| Total Current Liabilities | 186,826 | 200,355 |
| Noncurrent Liabilities: | | |
| Long-Term Obligations | 1,704,443 | 1,555,568 |
| Unamortized Discount and Loss | (75,206) | (81,322) |
| Derivative Instrument Liability | 12,519 | 29,227 |
| Other Noncurrent Liabilities | 35,710 | 25,256 |
| Net Pension Liability | 542 | -- |
| Total Noncurrent Liabilities | 1,678,008 | 1,528,729 |
| Total Liabilities | 1,864,834 | 1,729,084 |
| NET ASSETS | | |
| Invested in Capital Assets, Net of Related Debt | 254,798 | 225,589 |
| Restricted For: | | |
| Capital Projects | 88,011 | 97,580 |
| Debt Service | 130,298 | 117,852 |
| Rate Stabilization | 157,050 | 145,693 |
| Unrestricted | 147,827 | 168,480 |
| Total Net Assets | \$777,984 | \$755,194 |

STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS FOR THE FISCAL YEARS ENDED JUNE 30, 2011 AND 2010

(amounts in thousands)

| | 2011 | 2010 |
|--|------------------|------------------|
| Operating Revenues: | | |
| Charges for Goods and Services | \$553,169 | \$546,361 |
| Miscellaneous Operating Revenues | 5,314 | 5,989 |
| Total Operating Revenues | 558,483 | 552,350 |
| Operating Expenses: | | |
| Personal Services | 104,323 | 106,120 |
| Purchase of Services | 70,964 | 68,613 |
| Materials and Supplies | 35,147 | 35,429 |
| Employee Benefits | 91,046 | 71,634 |
| Indemnities and Taxes | 10,831 | 5,126 |
| Depreciation and Amortization | 86,924 | 86,490 |
| Total Operating Expenses | 399,235 | 373,412 |
| Operating Income (Loss) | 159,248 | 178,938 |
| Nonoperating Revenues (Expenses): | | |
| Operating Grants | 2,726 | 3,048 |
| Interest Income | 4,659 | 6,015 |
| Net Pension Obligation | (17,913) | (20,506) |
| Debt Service - Interest | (95,728) | (103,619) |
| Other Expenses | (7,310) | (4,967) |
| Total Nonoperating Revenues (Expenses): | (113,566) | (120,029) |
| Income (loss) before Transfers | 45,682 | 58,909 |
| Transfers Out | (24,930) | (28,315) |
| Capital Contributions | 2,038 | -- |
| Change in Net Assets | 22,790 | 30,594 |
| Net Assets - Beginning of Period | 755,194 | 715,896 |
| Adjustment | -- | 8,704 |
| Net Assets - End of Period | \$777,984 | \$755,194 |

STATEMENT OF CASH FLOWS, JUNE 30, 2011

(amounts in thousands)

| | 2011 | 2010 |
|---|------------------|------------------|
| Cash Flows from Operating Activities | | |
| Receipts from Customers | \$564,965 | \$535,572 |
| Payments to Suppliers | (125,583) | (89,110) |
| Payments to Employees | (190,006) | (175,309) |
| Claims Paid | (5,384) | (4,915) |
| Other Receipts (Payments) | -- | -- |
| Net Cash Provided by Operating Activities | 243,992 | 266,238 |
| Cash Flows from Non-Capital Financing Activities | | |
| Operating Grants Received | 2,726 | 3,048 |
| Operating Subsidies and Transfers to Other Funds | (24,930) | (28,315) |
| Net Cash Provided by Non-Capital Financing Activities | (22,204) | (25,267) |
| Cash Flows from Capital & Related Financing Activities | | |
| Proceeds from Capital Debt | 268,329 | 13,431 |
| Capital Contributions Received | 2,038 | -- |
| Acquisition and Construction of Capital Assets | (174,208) | (136,316) |
| Interest Paid on Capital Debt | (82,753) | (96,799) |
| Principal Paid on Capital Debt | (102,790) | (99,919) |
| Swap Termination Payments | (15,015) | -- |
| Other Receipts (Payments) | (9,022) | -- |
| Net Cash Provided (Used) by Non-Capital Financing Activities | (113,421) | (319,603) |
| Cash Flows from Investing Activities | | |
| Interest and Dividends | (1,078) | 4,560 |
| Net Cash Provided by Investing Activities | (1,078) | 4,560 |
| Net Increase (Decrease) in Cash & Cash Equivalents | 107,289 | (74,072) |
| Balances - Beginning of the Year | 360,107 | 434,179 |
| Balances - End of the Year | \$467,396 | \$360,107 |
| Reconciliation of Operating Income (Loss) to Net Cash Provided (Used) by Operating Activities: | | |
| Operating Income (Loss) | 159,248 | 178,938 |
| Adjustments to Reconcile Operating Income to Net Cash Provided (Used) by Operating Activities: | | |
| Depreciation Expense | 86,924 | 86,490 |
| Change in Assets and Liabilities: | | |
| Receivables, Net | 86,924 | (16,434) |
| Inventories | (279) | (113) |
| Accounts and Other Payables | (18,836) | 16,819 |
| Accrued Expenses | 10,453 | -- |
| Deferred Revenue | 1,748 | 538 |
| Net Cash Provided by Operating Activities | \$243,992 | \$266,238 |

BUDGETARY COMPARISON SCHEDULE

Water Operating Fund For the Fiscal Year

Ended June 30, 2011

(amounts in thousands)

| | BUDGETED AMOUNTS | | | FINAL BUDGET TO ACTUAL Positive (Negative) |
|--|--------------------|--------------------|--------------------|---|
| | Original | Final | Actual | |
| Revenues | | | | |
| Locally Generated Non-Tax Revenue | \$ 542,885 | \$ 540,127 | \$ 537,463 | \$ (2,664) |
| Revenue from Other Governments | 3,300 | 3,300 | 2,869 | (431) |
| Revenue from Other Funds | 64,726 | 49,044 | 27,138 | (21,906) |
| Total Revenues | \$ 610,911 | \$ 592,471 | \$ 567,470 | \$ (25,001) |
| Expenditures and Encumbrances | | | | |
| Personal Services | 112,175 | 111,725 | 100,839 | 10,886 |
| Pension Contributions | 40,300 | 38,487 | 42,169 | (3,682) |
| Other Employee Benefits | 40,480 | 42,293 | 42,279 | 14 |
| Sub-Total Employee Compensation | 192,955 | 192,505 | 185,287 | 7,218 |
| Purchase of Services | 128,864 | 128,864 | 116,625 | 12,239 |
| Materials and Supplies | 47,415 | 47,898 | 39,731 | 8,167 |
| Equipment | 5,693 | 5,660 | 2,862 | 2,798 |
| Contributions, Indemnities and Taxes | 6,603 | 6,603 | 5,384 | 1,219 |
| Debt Service | 195,044 | 195,044 | 185,543 | 9,501 |
| Debt Service – Interest | -- | -- | -- | -- |
| Short-Term Interest | -- | -- | -- | -- |
| Payments to Other Funds | 51,337 | 51,337 | 54,263 | (2,926) |
| Total Expenditures and Encumbrances | 627,911 | 627,911 | 589,695 | 38,216 |
| Operating Surplus (Deficit) for the Year | \$ (17,000) | \$ (35,440) | \$ (22,225) | \$ 13,215 |
| Fund Balance Available, July 1, 2010 | -- | -- | -- | -- |
| Operations in Respect to Prior Fiscal Years | | | | |
| Commitments Cancelled - Net | 17,000 | 17,000 | 22,225 | 5,225 |
| Prior Period Adjustments | -- | -- | -- | -- |
| Adjusted Fund Balance, July 1, 2010 | 17,000 | 17,000 | 22,225 | 5,225 |
| Fund Balance Available, June 30, 2011 | -- | \$ (18,440) | \$ -- | \$ 18,440 |

BONDED DEBT FOR THE FISCAL YEAR ENDED JUNE 30, 2011

(amounts in thousands)

| ORIGINAL AUTHORIZATION | | | FISCAL YEAR 2012 DEBT | | | | | |
|----------------------------------|----------|--------------------|------------------------------|--------------------|-------------------|---------------------|---------------------------|------------------------------|
| Series | Date | Issued | Outstanding June 30, 2011 | Maturities | Interest Rates | Service Interest | Principal Requirements | Outstanding June 30, 2012 |
| Revenue Bonds: | | | | | | | | |
| Series 1993 | 08/01/93 | 1,157,585 | -- | 06/2008 to 06/2011 | 5.50 to 7.00 | -- | -- | -- |
| Series 1995 | 04/15/95 | 221,630 | 26,280 | 08/2007 to 08/2012 | 5.30 to 6.25 | 1,245 | 12,730 | 13,550 |
| Series 1997 (B) | 11/25/97 | 100,000 | 73,000 | 08/2007 to 08/2027 | Variable | 79 | 2,900 | 70,100 |
| Series 1998 | 12/25/98 | 135,185 | 135,185 | 12/2011 to 12/2014 | 5.25 | 6,392 | 26,850 | 108,335 |
| Series 2001 | 11/15/01 | 285,920 | 137,875 | 11/2011 to 11/2028 | 3.800 to 5.500 | 6,733 | 12,980 | 124,895 |
| Series 2005 (A) | 05/04/05 | 250,000 | 230,390 | 07/2007 to 07/2035 | 3.250 to 5.250 | 11,480 | 4,795 | 225,595 |
| Series 2005 (B) | 05/04/05 | 86,105 | 82,870 | 08/2007 to 08/2018 | Variable | 3,744 | 425 | 82,445 |
| Series 2007 (A) | 05/04/07 | 191,440 | 175,180 | 08/2007 to 08/2027 | 4.00 to 5.00 | 8,340 | 4,795 | 170,385 |
| Series 2007 (B) | 05/04/07 | 153,595 | 152,900 | 11/2007 to 11/2031 | 4.00 to 5.00 | 6,951 | 220 | 152,680 |
| Series 2009 (A) | 05/21/09 | 140,000 | 140,000 | 01/2017 to 01/2036 | 5.150 to 5.250 | 7,294 | -- | 140,000 |
| Series 2010 (A) | 04/15/10 | 396,460 | 386,800 | 06/2010 to 06/2019 | 0.500 to 4.110 | 18,094 | 43,155 | 343,645 |
| Series 2010 (C) | 08/05/10 | 185,000 | 185,000 | 08/2016 to 08/2030 | 2.530 to 4.560 | 9,022 | -- | 185,000 |
| Pennvest-1999 | 04/30/00 | 6,700 | 639 | 07/2007 to 04/2019 | 1.410 to 2.730 | 17 | 74 | 565 |
| Pennvest-2009 (B) | 10/14/09 | 15,595 | 15,595 | 07/2013 to 06/2033 | 1.193 to 2.107 | 186 | -- | 15,595 |
| Pennvest-2009 (C) | 10/14/09 | 23,069 | 23,069 | 07/2013 to 06/2033 | 1.193 to 2.107 | 275 | -- | 23,069 |
| Pennvest-2009 (D) | 03/31/10 | 45,584 | 48,584 | 07/2013 to 06/2033 | 1.193 to 2.107 | 580 | -- | 48,584 |
| Total Revenue Bonds | | \$3,396,868 | \$1,813,367 | | | 80,433 | 108,924 | 1,704,443 |
| General Obligation Bonds: | | | | | | | | |
| Pennvest | 06/15/93 | 20,000 | 1,018 | 07/2007 to 04/2012 | 1.00 | 5 | 1,018 | -- |
| Total Bonded Debt | | | \$ 1,814,385 | | | 80,437 | 109,942 | 1,704,443 |

ANNUAL BONDED DEBT SERVICE REQUIREMENT: (amounts in thousands)

| <u>Fiscal Year</u> | <u>Interest</u> | <u>Principal</u> | <u>Total</u> |
|--------------------|-----------------|------------------|--------------|
| 2012 | 80,437 | 109,942 | 190,379 |
| 2013 | 75,185 | 117,271 | 192,456 |
| 2014 | 68,349 | 127,109 | 195,458 |
| 2015 | 63,203 | 133,503 | 196,706 |
| 2016 | 58,013 | 139,083 | 197,096 |

The First Series through the Thirteenth were refunded.

Capitalized Interest added to Construction in Progress in Fiscal 2011 was \$3,870,413. Interest Expense was reduced by the same amount.

SUPPLEMENTAL SCHEDULE OF RATE COVENANT COMPLIANCE FOR FISCAL YEAR ENDED JUNE 30, 2011 (Legally Enacted Basis)

(amounts in thousands)

| LINE NO. | 2011 |
|---|------------------|
| 1. Total Revenue and Beginning Fund Balance | \$ 589,694 |
| 2. Net Operating Expense | (357,642) |
| 3. Transfer (To) From Rate Stabilization Fund | (10,872) |
| 4. Net Revenues | 221,180 |
| 5. Revenue Bonds Outstanding | (184,316) |
| 6. General Obligation Bonds Outstanding | -- |
| 7. Pennvest Loan | (1,227) |
| 8. Total Debt Service | (185,543) |
| 9. Net Revenue after Debt Service | 35,637 |
| 10. Transfer to General Fund | (18,114) |
| 11. Transfer to Capital Fund | (17,523) |
| 12. Transfer to Residual Fund | (35,637) |
| 13. Total Transfers | |
| 14. Net Operating Balance for Current Year | -- |

The rate covenant contained in the General Ordinance requires the City to establish rates and charges for the use of the Water and Wastewater Systems sufficient to yield Net Revenues, as defined therein, in each fiscal year at least equal to 120% (coverage A) of the Debt Service Requirements for such fiscal year (excluding debt service due on any Subordinated Bonds). In addition, Net Revenues, in each fiscal year, must equal at least 100% (coverage B) of: (i) the Debt Service Requirements (including Debt Service Requirements in respect of Subordinated Bonds) payable in such fiscal year; (ii) amounts required to be deposited of Subordinated Bonds payable in such fiscal year; (iii) amounts required to be deposited into the Debt Reserve Account during such fiscal year; (iv) debt service on all General Obligations Bonds issued for the Water and Wastewater Systems payable in such fiscal year; (v) debt service payable on Interim Debt in such fiscal year; and (vi) the Capital Account Deposit Amount for such fiscal year, less amounts transferred from the Residual Fund to the Capital Account during such fiscal year. To insure compliance with the rate covenant, the General Ordinance requires that the City review its rates, rents, fees and charges at least annually.

Additional Rate Covenant. As long as the Insured Bonds are outstanding, the City covenants to establish rates and charges for the use of the System sufficient to yield Net Revenues (excluding amounts transferred from the Rate Stabilization Fund into the Revenue Fund during, or as of the end of, such fiscal year) at least equal to 90% (coverage C) of the Debt Service Requirements (excluding debt service on any Subordinated Bonds) in such fiscal year.

| Coverage A: | | Coverage B: | | Coverage C: | |
|---------------|-----------|-------------------|-----------|-----------------|-----------|
| Line 4 | \$221,180 | Line 4 | \$221,180 | Line 4 - Line 3 | \$232,052 |
| /Line 5 | \$184,316 | /Line 8 + Line 11 | \$203,657 | /Line 5 | \$184,316 |
| = COVERAGE A: | 1.20 | = COVERAGE B: | 1.09 | = COVERAGE C: | 1.26 |

1. THE GOVERNMENT OF PHILADELPHIA

The City of Philadelphia was founded in 1682 and was merged with the county in 1854. The City currently occupies an area of 129 square miles along the Delaware River, serves a population in excess of 1.4 million and is the hub of a five-county metropolitan area including Bucks, Chester, Delaware and Montgomery counties in Southeastern Pennsylvania.

The City's Water Department supplies water and provides wastewater treatment services to residents of Philadelphia and portions of Bucks, Montgomery and Delaware Counties (G.O. rated Aa1, Aaa, and Aa2, respectively), although over 90% of customers are residents of the City and approximately 9% are from Bucks County. Philadelphia has experienced a long trend of industry and population loss since 1950, with a particularly sharp economic retreat hitting in the late 1980s and early 1990s. The late 1990's saw a resumption of growth, with employment up 5.7% between 1998 and 2001, and then down about 1.6% between 2001 and 2003, reflecting the slowdown in the national economy. The decline flattened in fiscal 2004 and then grew by about 1.0% in 2005, 0.9% in 2006, and 0.7% in 2007. Although employment continued to grow for 2008 (overall annual growth was 0.2%), employment growth halted in October and turned negative in every month from November through March. Manufacturing has continued to decline in importance, and as of 2005, diversified services account for 54% of total employment (or more than 60% including the finance/insurance/real estate sector). Population loss during the 1990s was just over 4%, although this was only about half the loss that had been estimated prior to the 2000 census count. With an estimated 1.45 million residents, the City remains the nation's fifth most populous. The suburban portions of the service area are wealthier and somewhat faster-growing than the City, but are much less significant to the system as they account for less than 10% of total customer revenues.

There are two principal governmental entities in Philadelphia: (1) the City of Philadelphia, which performs both the ordinary Municipal functions and the traditional County functions; and (2) the School District of Philadelphia, which is part of the Public Education System of the Commonwealth of Pennsylvania. In addition to the School District of Philadelphia, there are a number of other governmental and quasi-governmental entities operating within the City. The financial statements as set forth herein present only the operations of the City of Philadelphia Water Fund.

The City is governed largely under the 1951 Philadelphia Home Rule Charter. In some matters, including the issuance of short and long-term debt, the City is governed by the laws of the Commonwealth of Pennsylvania.

The City Government is responsible for establishing and the Water Department is responsible for maintaining internal controls designed to protect the assets of Water Department from loss, theft or misuse and to ensure that adequate accounting data are compiled to allow for the preparation of Financial Statements in conformity with **Generally Accepted Accounting Principles**. These internal controls are subject to periodic evaluation by management and the City Controller's Office in order to determine their adequacy.

The Philadelphia Water Department serves the Greater Philadelphia region by providing an integrated water, wastewater and stormwater system. The utility's primary mission is to plan for, operate, and maintain both the infrastructure and the organization necessary to purvey high quality drinking water, to provide an adequate and reliable water supply for all household, commercial and community needs, and to sustain and enhance the region's watersheds and quality of life by managing wastewater and stormwater effectively. In fulfilling its mission, the utility seeks to be customer-focused, delivering services in a fair, equitable and cost-effective manner, with a commitment to public involvement. Having already served the City and region for nearly two centuries, the utility's commitment for the future includes an active role in the economic development of Greater Philadelphia and a legacy of environmental stewardship.

The Water Revenue Bureau of the Department of Revenue of the City gathers and processes meter readings of the Water Department customers, issues the invoices for the services provided by the Water Department, and processes the revenue collected for these services, thus maintaining the Accounts Receivable of the Water Department. The Director of Finance performs general fiscal accounting and has overall responsibility for the fiscal administration of all City departments, including the Water Department. The audit requirements for the City, including the Water Department, are the responsibility of the Office of the City Controller. Legal matters affecting the Water Department are the responsibility of the Office of the City Solicitor.

In order to accomplish its mission and pursuant to the Philadelphia Home Rule Charter, the Water Department has the power and duty to operate, maintain, repair and improve the City's Water and Wastewater Systems. The Water Department is managed by a Commissioner who is appointed by the City's Managing Director with the approval of the Mayor. The Commissioner appoints his deputies with the approval of the City's Managing Director and substantially all other employees are appointed under the provisions of the City's Civil Service Regulations. The executive offices of the Water Department are located at Aramark Tower, 1101 Market Street, Philadelphia, Pennsylvania 19107-2994.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The financial statements of the Philadelphia Water Department have been prepared in accordance with Generally Accepted Accounting Principles (GAAP) as they apply to governmental units. The Governmental Accounting Standards Board (GASB) of the American Institute of Certified Public Accountants is the accepted standard setting body for establishing governmental accounting and financial reporting principles. The more significant of the City's accounting policies are described below.

A. Basis of Accounting

For purposes of rate setting, calculating rate covenant compliance, debt service coverage and budgeting, the Water Fund accounts are maintained on the modified accrual basis of accounting also referred to as the "Legally Enacted Basis." Under this basis, revenues are recognized in the accounting period in which they are received. Investment earnings are recorded when earned, as they are measurable and available. Expenditures are recorded in the accounting period in which the fund liability is incurred, if measurable, except expenditures for debt service, prepaid expenditures, and other long-term obligations, which are recognized when paid. Expenditures for claims and judgments, compensated absences and other long-term obligations are accrued if expected to be liquidated with available resources.

At fiscal year-end, the Water Fund accounts are adjusted to the full accrual basis of accounting required by GAAP. The Water Fund is accounted for on a flow of economic resources measurement focus.

With this measurement focus, all assets and all liabilities associated with the operation are included on the Statement of Net Assets. Fund equity (i.e., net total assets) is segregated into contributed capital and retained earnings components. In accrual basis accounting, revenues are recognized in the accounting period in which they are earned and expenses are recognized at the time the liabilities are incurred. Under GASB Statement No. 20, Accounting and Financial Reporting for Proprietary Activities, the Water Fund will continue to follow Financial Accounting Standards Board (FASB) pronouncements issued on or before November 30, 1989 unless those pronouncements conflict with or contradict GASB pronouncements and will follow FASB standards issued after that date which do not conflict with GASB standards.

Water revenues, net of uncollected accounts, are recognized as billed on the basis of scheduled meter readings. Revenues are accrued for unpaid bills at June 30 and for services provided but not yet billed at June 30.

B. Legal Compliance

The City's budgetary process accounts for certain transactions on a basis other than GAAP.

In accordance with the Philadelphia Home Rule Charter, the City has formally established budgetary accounting control for its operating and capital improvement funds.

The operating funds of the City – consisting of the General Fund, five Special Revenue Funds (County Liquid Fuels Tax, Special Gasoline Tax, Hotel Room Rental Tax, Grants Revenue and Community Development Funds) and two Enterprise Funds (Water and Aviation Funds) – are subject to annual operating budgets adopted by City Council. These budgets appropriate funds for all City departments, boards and commissions by major class of expenditure within each department. Major classes are defined as: personal services; purchase of services; materials and supplies; equipment; contributions; indemnities and taxes; debt service; payments to other funds; and miscellaneous. The appropriation amounts for each fund are supported by revenue estimates and take into account the elimination of accumulated deficits and the re-appropriation of accumulated surpluses to the extent necessary. All transfers between major classes (except for materials and supplies and equipment, which are appropriated together) must have Council approval. Appropriations not expended or encumbered at year-end are lapsed. Departmental comparisons of budget to actual activity are located in the City's Supplemental Report of Revenues and Obligations.

The City Capital Improvement Fund budget is adopted annually by the City Council. The Capital Improvement budget is appropriated by project for each department. Due to the nature of the projects, it is not always possible to complete

all bidding, contracts, etc. within a twelve-month period. All transfers between projects exceeding twenty percent for each project's original appropriation must be approved by City Council.

As part of the amendment process, budget estimates of City-related revenues are adjusted and submitted to City Council for review. Changes in revenue estimates do not need City Council approval, but are submitted in support of testimony with regard to the appropriation adjustments.

The following schedule reconciles the differences between the Legally Enacted Basis and GAAP Basis:

WATER FUND

| | | |
|--|----|--------------------|
| Fund Balance-Legal Basis 6/30/11 | \$ | - - |
| Assets omitted from the legal basis: | | |
| (1) Receivables from Other Governments or Funds | \$ | 45,117 |
| (2) Fixed Assets-Net of Depreciation | | 1,886,726 |
| (3) Restricted Assets | | 537,442 |
| (4) Proprietary Portion of Net Pension Obligation | | (542) |
| | \$ | <u>2,468,743</u> |
| Liabilities omitted from the legal basis: | | |
| (5) Construction Contracts Payable | \$ | (23,096) |
| (6) Other Current Liabilities | | (142,559) |
| (7) Bonds Payable and Other Long-Term Debt | | (1,664,946) |
| | \$ | <u>(1,830,601)</u> |
| Fund Balance accounts included in the legal basis: | | |
| (8) Reserve for Collectible Receivables | \$ | 86,631 |
| (9) Reserve for Inventories | | 13,192 |
| (10) Reserve for Purchase Commitments | | 40,019 |
| | \$ | <u>139,842</u> |
| Equity accounts omitted from the legal basis: | | |
| (11) Invested in Capital Assets, Net of Related Debt | | (254,798) |
| (12) Restricted for Capital Projects | | (88,011) |
| (13) Restricted for Debt Service | | (130,298) |
| (14) Restricted for Rate Stabilization | | (157,050) |
| | \$ | <u>(630,157)</u> |
| Unrestricted Net Assets – GAAP Basis – 6/30/2011 | \$ | <u>147,827</u> |

C. Water Account

The City has established a City of Philadelphia Water Account to be held exclusively for Water Department purposes, separate and apart from all other funds and accounts of the City, and not to be commingled with the City's Consolidated Cash Account or any other fund or account of the City not held exclusively for Water Department purposes.

The City has covenanted that it will not make temporary loans or advances of Bond proceeds or Project Revenues (even while temporarily held in the City's Consolidated Cash Account) from the Water Account, the Water Sinking Fund, the Water Sinking Fund Reserve or the Water Rate Stabilization Fund to any City account not held exclusively for Water Department purposes. The City has established subaccounts within the Water Account into which deposits and from which disbursements shall be made for operating and capital purposes.

D. Pledge of Revenues

Section 4.02 and 4.04 of the ordinance of 1989, amended 1993, which authorized the issuance of Water and Sewer Revenue Bonds, hereby pledges and assigns to the Fiscal Agent for the security and payment of all Bonds, a lien on and security interest in all Project Revenues and amounts on deposit in or standing to the credit of the: 1) Revenue Fund; 2) Sinking Fund et al.; 3) Subordinated Bond Fund; 4) Rate Stabilization Fund; 5) Residual Fund; and 6) Construction Fund et al. The Fiscal Agent shall hold and apply the security interest granted in trust for the Holders of Bonds listed above without preference, priority or distinction; provided however, that the pledge of this ordinance may also be for the benefit of a Credit Facility and Qualified Swap, or any other person who undertakes to provide moneys for the account of the City for the payment of principal or redemption price and interest on any Series of Bonds (other than Subordinated Bonds), on an equal and ratable basis with Bonds, to the extent provided by any Supplemental Ordinance or Determination.

E. Grants from Other Governments

Grants from Federal, State and other governments are recognized as revenue when grant expenditures have been recorded. Grants are recorded as non-operating revenues.

F. Property, Plant and Equipment

Property, plant and equipment are stated at cost. Where cost could not be developed from the records available, estimated historical cost was used to record the value of the assets. Upon sale or retirement, the cost of the assets and the related accumulated depreciation are removed from the accounts. Maintenance and repair costs are charged to operations.

Capital assets are defined by the City as assets with an initial individual cost of more than \$5,000 and an estimated useful life in excess of three years.

G. Depreciation

Depreciation on fixed assets is provided on the straight-line method over their estimated useful lives as follows:

| | |
|---|-------------|
| Computer equipment | 3 years |
| Automotive | 5 years |
| Leasehold Improvements | 8 years |
| General and monitoring equipment | 10-20 years |
| Buildings | 40 years |
| Reconstructed transmission and distribution lines | 40 years |
| New transmission and distribution lines | 50 years |

H. Construction in Progress

Cost of construction includes all direct contract costs plus overhead charges. Overhead costs include direct and indirect engineering costs and interest incurred during the construction period on projects financed with Revenue Bond proceeds. Interest is capitalized by applying the average financing rate during the year to construction costs incurred. Interest earnings on bond proceeds reduce the amount capitalized. Capitalization of interest during construction for Fiscal Year 2011 was \$3,870,413.

I. Amortization of Bond Discount

Bond discounts and issuance costs are deferred and amortized by the bonds outstanding method.

J. Inventories

The materials and supplies inventory is priced using the "moving average cost" method.

K. Revenues

All billings rendered to general customers through June 30, 2011 are included in accounts receivable. In addition, an amount for services rendered through June 30, 2011, but not billed, has been accrued. Historically, billings and collections for general customers remain relatively constant except for periods when there has been a rate change.

L. Rates

Under the Charter, the Water Department is empowered and required to establish rates for water and wastewater service, in accordance with standards ordained by City Council, but without further authorization required by the City Council, at levels which provide sufficient revenue to meet operating expenses of the water and wastewater systems, including interdepartmental charges for services provided to the Water Department, and debt service requirements on all obligations issued for the Water

Department, as well as other specific covenants of the General Ordinance.

The City has covenanted in the General Ordinance that it has authorized the imposition of rates and charges by the Water Department sufficient to comply with the Rate Covenant and that it will not repeal or materially adversely dilute or impair such authorization.

The Philadelphia Code requires the Water Department to give written notice to City Council at least 30 days in advance of the filing of notice of any proposed change in water or sewer rates or charges and to submit, with such written notice, financial, engineering and other data upon which the proposed changes are based. After the filing of the proposed regulations providing for changes in rates or charges with the City's Department of Records, the Department of Records is required to give public notice that the regulations have been filed and that any person affected by the proposed regulations may request a public hearing before the Water Department and the City Solicitor. Revised rates and charges become effective ten days after filing of a decision by the Water Commissioner at the conclusion of hearings or at any time thereafter, at his discretion.

The Water Department filed a notice of request for new rates for the period Fiscal Year 2009 through Fiscal Year 2012 with City Council on April 4, 2008. The rate request was filed with the Department of Records on May 5, 2008. In accordance with the regulations, a hearing examiner and public advocate were appointed. Public hearings were held during the period from July 21 to July 31 and technical hearings were held during the week of August 11, 2008. The Department also proposed to change the way it charges customers for stormwater management services; this part of the case was concluded with the Water Commissioner's decision of July 21, 2009, and new stormwater rates and charges were effective on July 1, 2010.

The new rates will allow the Water Department to meet rapidly escalating costs of fuel, chemicals, employee benefits, regulatory demands and debt service, and to continue a variety of initiatives that are critical to protecting Philadelphia's drinking water quality, preserving its waterways, and improving stormwater management programs. The continuing demographic changes in the City are causing the Department's fixed costs (to maintain water mains, sewer mains, pumping stations, treatment plants, sewer inlets, etc.) to be spread over fewer customers.

The legality of the Rate Determination has been challenged in a civil action commenced on December 17, 2009 upon the filing of a Complaint in Equity (the "Complaint") with the Court of Common Pleas. The Complaint contains seven counts that purport to state claims seeking declaratory relief under the Declaratory Judgments Act, 42 Pa. C.S. 7531, et seq., challenging the legality of parts of the Rate Determination and related regulations (Sections 300, et seq.) issued by the Water Commissioner, effective November 1, 2009 (the "Rate Determination Regulations"), to the extent that the Rate Determination Regulations establish three successive increases in water and sewer rates implemented or to be implemented during the period including Fiscal Years 2010 through 2012. Preliminary objections were filed in response to the Complaint on January 22, 2010. These objections address all seven counts of the Complaint and request that the Common Pleas Court dismiss the Complaint on several grounds. Replies to such preliminary objections were filed February 12, 2010, and a sur-reply was filed on March 1, 2010. On May 12, 2010, the Court sustained the preliminary objections raised by the Water Department and dismissed the Complaint in its entirety.

Plaintiffs appealed the Common Pleas Court dismissal to the Commonwealth Court of Pennsylvania. After the submission of briefs and oral argument, the Commonwealth Court reversed the Common Pleas Court dismissal on May 4, 2011 and remanded the case for further proceedings. A case management conference was held on October 3, 2011. The Case was assigned #091201695 and a scheduling order was issued on October 14, 2011. The City believes that the lawsuit is without merit; however, there can be no assurance of the outcome of the appeal pending before the Common Pleas Court and the effect of such litigation on future rates.

M. Advance Service Charge

The City's Water Fund Regulations provide for the assessment of an "Advance Service Charge" (ASC) at the time a property is initially connected to the system. The initial charge is calculated to be the equivalent of three monthly service charges. This long-standing practice of assessing an initial charge equivalent to the average of three monthly service charges has been consistent whether the billing period was semi-annually (through 1979), quarterly (1979-1994) or monthly (1994-current). The Fund includes these charges in current revenues at the time they are received. Fund regulations also provide for a refund of any advance service charges upon payment of a \$100 fee and permanent disconnection from the system. During FY11, 262 disconnection permits were issued resulting in a refund or final credit of approximately \$331,640 and 1,034 new connection permits were issued resulting in additional advance service charges of approximately \$380,680.

N. Insurance

The City, except for the Gas Works, the Airport, and certain other properties, is self-insured for most fire and casualty losses to its structures and equipment

and provides statutory worker's compensation, unemployment benefits and health and welfare to its employees through a self-insured plan. Construction contractors are required to carry protective general liability insurance indemnifying the City and the Contractor. A reserve for payment of reported worker's compensation claims and incurred but unreported claims has been recorded in the accompanying financial statements as Other Long-Term Obligations.

O. Investments

All highly liquid investments (except for Repurchase Agreements) with a maturity of three months or less when purchased are considered to be cash equivalents.

The investments of the City are reported at fair value. Short-term investments are reported at cost, which approximates fair value. Securities traded on national or international exchanges are valued at the last reported sales price. The fair value of real estate investments is based on independent appraisals. Investments, which do not have an established market, are reported at estimated fair value.

P. Deferred Revenues

Deferred revenues represent funds received in advance of being earned. In the Water Fund, deferred revenues relate principally to overpaid Water and Sewer bills.

Q. Interfund Charges

In accordance with an agreement between the Finance Director and the Water Department, the Finance Director may transfer to the General Fund up to a limit of \$4,994,000 in any fiscal year in "excess interest earnings" as defined by the Rate Covenants under the Ordinance. In Fiscal 2011, excess interest earnings of \$1,229,851 were transferred to the General Fund of the City.

3. ACCOUNTS RECEIVABLE

Balances consisted of the following:

FISCAL YEAR ENDED JUNE 30, 2011

Accounts Receivable:

| | |
|----------------------------------|-------------------|
| Billed in the Last Twelve Months | \$ 117,632,542 |
| Billed in 15-year Cycle Billing | 72,712,071 |
| Penalties on Receivables | 24,767,472 |
| Other Receivables | 21,529,683 |

Total \$ 236,641,768

Bad Debts Written Off \$ 7,339,557

ALLOWANCE FOR DOUBTFUL ACCOUNTS:

| | |
|----------------------------------|-------------------|
| Billed in the Last Twelve Months | \$ -- |
| Billed in 15-year Cycle Billing | 48,584,676 |
| Penalties on Receivables | 31,730,041 |
| Other Receivables | 24,822,886 |

TOTAL \$ 105,137,603

Balances consisted of the following:

FISCAL YEAR ENDED JUNE 30, 2010

Accounts Receivable:

| | |
|----------------------------------|-------------------|
| Billed in the Last Twelve Months | \$ 130,889,170 |
| Billed in 15-year Cycle Billing | 43,896,918 |
| Penalties on Receivables | 28,576,468 |
| Other Receivables | 21,807,363 |

Total \$ 225,169,919

Bad Debts Written Off \$13,535,707

ALLOWANCE FOR DOUBTFUL ACCOUNTS:

| | |
|----------------------------------|-------------------|
| Billed in the Last Twelve Months | \$ -- |
| Billed in 15-year Cycle Billing | 41,994,835 |
| Penalties on Receivables | 27,484,229 |
| Other Receivables | 21,501,324 |

TOTAL \$ 90,980,388

4. THE TEN LARGEST RETAIL CUSTOMERS OF THE PHILADELPHIA WATER DEPARTMENT DURING FISCAL YEAR 2011

| Customer | Billings (millions) | % of total Billings | Consumption (MGD) | % of total Consumption |
|--------------------------------|------------------------|------------------------|----------------------|---------------------------|
| City of Philadelphia | \$30.050 | 5.56% | 4.44 | 5.42 % |
| Philadelphia Housing Authority | 11.541 | 2.14 | 1.88 | 2.29 |
| Philadelphia School District | 6.344 | 1.17 | 0.59 | 0.72 |
| Trigen Corporation | 4.361 | 0.81 | 1.08 | 1.32 |
| University of Penna. | 3.821 | 0.71 | 0.76 | 0.92 |
| Sunoco | 3.710 | 0.69 | 2.27 | 2.77 |
| Temple University | 3.015 | 0.56 | 0.61 | 0.74 |
| Federal Government | 2.454 | 0.45 | 0.33 | 0.40 |
| Paperworks Industries Inc. | 2.187 | 0.40 | 1.46 | 1.78 |
| SEPTA | 1.769 | 0.37 | 0.18 | 0.22 |
| Total Top Ten | \$69.476 | 12.86 % | 13.59 | 16.58 % |
| Total Retail Billings | \$540.469 | | 82.03 | |

5. WHOLESALE CUSTOMERS OF PWD DURING FISCAL YEAR 2011

The Department is permitted, via ordinance, to provide wholesale water and sewer service to jurisdictions outside of the City's borders. This "wholesale" service is provided via agreement. Service is limited to delivery of water or acceptance of wastewater at the City border.

| Wastewater Customer | Revenues |
|--------------------------------------|----------------------|
| Delcora | \$ 8,857,559 |
| Bucks County Water & Sewer Authority | 7,032,982 |
| Cheltenham Township | 3,206,008 |
| Upper Darby Township | 2,726,033 |
| Lower Southampton Township | 2,679,088 |
| Lower Merion Township | 2,376,781 |
| Springfield Township - Erdenheim | 1,466,265 |
| Bucks (for Bensalem) | 1,447,024 |
| Abington Township | 1,220,131 |
| Lower Moreland Township | 700,356 |
| Springfield Township - Wyndmoor | 238,807 |
| Total | \$ 31,951,034 |
| Water Customer | Revenues |
| Bucks County Water & Sewer Authority | \$ 6,481,920 |
| Aqua PA | 3,445,684 |
| Total | \$ 9,927,604 |
| Total Wholesale Revenues | \$ 41,878,638 |

6. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment at June 30, 2011 and 2010 consisted of the following:

| Fiscal Years Ended | June 30, 2011 | June 30, 2010 |
|-------------------------------------|-------------------------|-------------------------|
| Land | \$ 5,919,160 | \$ 5,919,160 |
| Buildings and related improvements | 1,446,222,750 | 1,427,513,880 |
| Meters and other improvements | 96,866,875 | 96,773,569 |
| Equipment | 68,098,745 | 69,993,066 |
| Transmission and distribution lines | 1,958,386,850 | 1,887,148,203 |
| Construction in progress | 270,769,067 | 204,590,604 |
| Total | \$ 3,846,263,447 | \$ 3,691,938,482 |
| Less: Accumulated Depreciation | (1,959,538,121) | (1,880,592,059) |
| Total | \$ 1,886,725,326 | \$ 1,811,346,423 |

7. IMPAIRED ASSETS

Government Accounting Standards Board (GASB) Statement 42 requires the disclosure of the impairment of any major capital assets. Over the years there have been a number of PWD assets that were either damaged or destroyed, were abandoned or became functionally obsolete.

In the past, as these assets were removed from service their cost was removed from Utility Plant in Service. Assets that were removed from service include the first Mixing & Receiving building at our Biosolids Recycling Center (BRC) which was destroyed by fire in the early 1990s; the grit, scum and screenings incinerators and related handling equipment at our wastewater plants which were abandoned due to clean air permit considerations; the chlorine facilities at our water and wastewater plants that were replaced due to safety and clean air act considerations; and the high pressure fire system which was removed from service in January 2005 when it was determined to be functionally obsolete.

One additional facility remains in service, which has become "functionally obsolescent" – the portion of our Biosolids Recycling Center which performs composting. Composting of our sludge products was stopped in approximately March of 2007 as an interim solution to the air management problems that have occurred at this site. A permanent solution for sludge processing that does not involve composting is still in the development. PWD's engineering division estimates the

value of the compost facilities that are "functionally obsolescent" (these were built in conjunction with the remaining BRC facilities which will remain in service such as the mixing/receiving building, administrative offices and the dewatering facility) to be in the area of \$20 million, including the value of any land acquisition and site preparation costs.

In the summer of 2003, the Water Department began a process to move to an entirely Class A biosolids process – one that could operate in Philadelphia without odors. PWD entered into a contract with the engineering consultants Camp, Dresser & McKee to assist with procurement of facilities and services for Philadelphia, to operate the dewatering station for 20 years, and to construct new facilities to produce Class A biosolids products. Alternative processes identified for this procurement process included fully enclosed composting systems and heat-drying technologies.

The Request for Qualifications was released in August 2003 and, in response, the City received qualification statements from four teams, of which two were found qualified and invited to receive a Request for Proposals. One team, Philadelphia Biosolids Services, LLC ("PBS") submitted a proposal on November 24, 2004. This team offered to build a pair of sludge dryers. The Water Department has negotiated a long-term contract with PBS for improvements to the Biosolids Recycling Center. The contract includes a provision for interim operation of up to five years, during which PBS will take over operation of the existing Biosolids Recycling Center. Within the first three to five years, PBS will finance, design, build, own and operate a thermal drying facility that will handle all of the sludge processed by the Water Department and make a Class A product in the form of pellets that can be used as fertilizer and has potential as a fuel. PBS will be responsible for the disposition of the Class A pellets, thus relieving the Water Department of this burden. The Class A period of operation will last twenty years with a five-year renewal at the option of the Water Department. The project is estimated to result in a savings of approximately \$200 million over the contract life. On June 19, 2008, City Council passed enabling legislation to allow the proposed contract to proceed. Mayor Nutter approved the contract with PBS in October 2008 and PBS has been operating the facility since October 13, 2008. Total payments for Fiscal Year 2009 were \$12,609,352. Total payments for Fiscal Year 2010 were \$22,828,657. Total payments for Fiscal Year 2011 were \$21,418,021. The Fiscal Year 2012 proposed budget includes \$22,510,000 for payments to PBS.

As a result of the transfer of operations and the discontinuance of composting operations, a total of \$40.5 million of equipment and facilities were retired. The balance of the equipment and facilities being utilized by the contractor remains on the balance sheet.

No additional asset impairments occurred during FY 2011.

8. VACATION

Employees are credited with vacation at rates which vary according to length of service. Vacation may be taken or accumulated up to certain limits until paid upon retirement or termination. Employees' vacation time accrued in Fiscal Year 2011 was \$9,413,414 and in 2010 was \$9,120,870. The expense for vacation pay is recognized in the year earned.

9. SICK LEAVE

Employees are credited with varying amounts of sick leave per year according to type of employee and/or length of service. Employees may accumulate unused sick leave to 200 days and union-represented employees may convert up to 20 sick days per year to vacation days at a ratio of 2 for 1. Non-uniformed employees (upon retirement only) are paid 30% of unused sick time, not to exceed predetermined amounts. Employees who separate for any reason other than indicated above forfeit their entire sick leave. The City budgets for and charges the cost of sick leave as it is taken.

10. CAPITALIZED LEASES

Leases consist of \$2,146,804 in photocopier and computer equipment in Fiscal 2011. Capital leases are defined by the Financial Accounting Standard Board in Statement 13, Accounting for Leases.

11. RATE STABILIZATION FUND

The Rate Stabilization Fund was created with the sale of the Series 1993 Revenue Bonds on August 20, 1993. The purpose of the Fund is to maintain assets to be drawn down to offset future deficits (and corresponding rate increase requirements) in the Water Department Operating Fund.

During Fiscal 2011 the fund had the following activity:

| | |
|--|-----------------------|
| Balance at July 1, 2010 | \$ 145,692,991 |
| Deposit from Operating Fund | 10,872,463 |
| Interest Earnings | 484,919 |
| Interest Transferred to Water Operating Fund | -- |
| Balance at June 30, 2011 | \$ 157,050,373 |

12. RESIDUAL FUND

The Residual Fund was created with the sale of the Series 1993 Revenue Bonds on August 20, 1993. The purpose of the Fund is to maintain the remaining assets after payment of all operating expenses, payment of all debt service obligations including payments under a Swap agreement, scheduled transfers to the Rate Stabilization fund, and required deposits to the Capital Account of the Construction Fund.

During Fiscal 2011 the fund had the following activity:

| | |
|---|----------------------|
| Balance at July 1, 2010 | \$ 63,380,087 |
| Interest Income | 178,077 |
| Deposit from Operating Fund | 17,522,642 |
| Capital Payments for New River City Project | (23,888,520) |
| Transfer to General Fund | (1,229,851) |
| Transfer to Sinking Fund Reserve | (2,446,497) |
| Balance at June 30, 2011 | \$ 53,515,938 |

Note: Currently \$18,602,941 is reserved for prior year encumbrances. (New River City Project)

13. DEBT RESERVE ACCOUNT

The General Ordinance establishes within the Sinking Fund a Debt Reserve Account which shall be funded from the proceeds of each series of Water and Wastewater Revenue Bonds; provided, however, that if the Supplemental Ordinance authorizing a series of Water and Wastewater Revenue Bonds shall so authorize, the deposit to the Debt Reserve Account in respect of such Water and Wastewater Revenue Bonds may be accumulated from Project Revenues over a period of not more than three Fiscal Years after the issuance and delivery of such Water and Wastewater Revenue Bonds. The monies and investments in the Debt Reserve Account shall be held and maintained in an amount equal at all times to the Debt Reserve Requirement. If at any time the moneys in the Debt Service Account of the Sinking Fund shall be insufficient to pay as and when due the principal of (and premium, if any) or interest on any Water and Wastewater Revenue Bonds or other obligations payable from the Debt Service Account (including obligations arising in connection with Qualified Swap Agreements and Credit Facilities), the Fiscal Agent is required to pay over from the Debt Reserve Account the amount of such deficiency for deposit in the Debt Service Account. With respect to any issue of Water and Wastewater Revenue Bonds, in lieu of the required deposit into the Debt Reserve Account, the City may cause to be deposited into the Debt Reserve Account a surety bond, an insurance policy or an irrevocable letter of credit meeting the requirements of the General Ordinance and the Bond Committee Determination relating to such issue.

The Debt Reserve Account Amendment authorizes (i) the Director of Finance to apply moneys currently on deposit in the Debt Reserve Account to purchase a surety bond or insurance policy complying with the terms of the General Ordinance (described below); (ii) the transfer of the resulting excess moneys in the Debt Reserve Fund to the Revenue Fund and from there, upon compliance with the provisions of the General Ordinance to a new account in the Residual Fund called the Special Water Infrastructure Account; and (iii) the application of the moneys deposited in the Special Water Infrastructure Account to the cost of renewals, replacements and improvements to the Water and Wastewater Systems.

Under the terms of the General Ordinance, any surety bond, insurance policy or letter of credit provided by the City in

lieu of required deposits within the Debt Reserve Account would have to meet the credit quality requirements of the General Ordinance. The insurer providing a surety bond or insurance policy is required to be an insurer whose municipal bond insurance policies insuring the payment of bond issues results in such issues being rated not lower than the second highest rating category (without regard to ratings subcategories) by either Moody's Investor's Service Inc. ("Moody's") or Standard & Poor's Ratings Service ("S&P"). The letter of credit issuer providing a letter of credit is required to be a bank or trust company which is rated not lower than the second highest rating category (without regard to ratings subcategories).

On November 26, 2007, the City deposited a surety policy issued by AGM in a principal amount of \$67 million dollars to replace a portion of the cash and investments then existing in the Debt Reserve Account. The balance of the Debt Reserve Account as of September 30, 2011, in the amount of \$130,182,797.74, was funded with Water and Wastewater Revenue Bond proceeds and earnings on the investment thereof. A transfer of \$1,520,444.68 from the Water Residual Fund to the Water Debt Service Reserve Fund was made on or about September 30, 2011 to cover additional reserve requirements related to the Water Department's Pennvest loans.

On March 5, 2010, Moody's affirmed the Aa3 insurance financial strength rating of AGM, with a negative outlook. On September 27, 2011, S&P placed its AA+ counterparty credit and financial strength ratings on AGM on credit watch with negative implications. On November 30, 2011, Standard & Poor's Ratings Services ("S&P") lowered its counterparty credit and financial strength ratings on Assured Guaranty Municipal Corp. ("AGM") to "AA-" from "AA+". In addition, on November 30, 2011, S&P removed the ratings on AGM from credit watch, where they had been placed on September 27, 2011, with negative implications, and stated the outlook as stable. S&P's rating of AGM reflects only the view of S&P; and any desired explanation of the significance of such rating should be obtained from S&P.

An explanation of the significance of any rating action should be obtained from the rating agency furnishing same. AGM currently meets the credit rating requirements prescribed by the General Ordinance with respect to eligible providers of surety policies for deposit in the Debt Reserve Account. The City and the Water Department are monitoring the financial condition and ratings of AGM in relation to such credit quality requirement. There can be no assurance as to any further ratings action that Moody's or S&P may take with respect to AGM.

The City filed an updated disclosure regarding the S&P AGM downgrade on December 8, 2011 as required by the continuing disclosure agreement.

14. ACCOUNTING FOR THE NEW RIVER CITY PROJECT FUNDS – WATER SINKING FUND RESERVE SUBSTITUTION

Pursuant to the Water Department's General Bond Ordinance, the Sinking Fund Reserve provides a reserve against default of the payment of principal and interest on Water Revenue Bonds when due. The New River City

Ordinance dated 1/23/07 (Bill No 060005) authorized the purchase and deposit of a surety bond that meets the requirements of the General Ordinance to replace \$67,000,000 of the Sinking Fund Reserve Balance. The \$67,000,000 will be used as follows:

| | |
|-------------|--|
| \$2,010,000 | Cost of the surety bond |
| 290,000 | legal and financial services |
| 375,000 | Management fees |
| 64,325,000 | Costs of certain water and sewer infrastructure components of the New River City Program |

The prepaid surety bond was recorded as an asset in the Sinking Fund Reserve and amortized over the lives of the outstanding bonds.

As of June 30, 2011, \$18,602,941 in unexpended proceeds from the substitution remains. PWD has approved projects that are currently in process that would expend the balance of the remaining funds.

15. DEFERRED COMPENSATION PLAN

The City offers its employees a deferred compensation plan in accordance with Internal Revenue Code section 457. As required by the Internal Revenue Code and Pennsylvania laws in effect at June 30, 2007, the assets of the plan are held in trust for the exclusive benefit of the participants and their beneficiaries. In accordance with GASB Statement No. 32, *Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans*, the City does not include the assets or activity of the plan in its financial statements.

16. ARBITRAGE REBATE

The City has issued Water Revenue Bonds subject to Federal arbitrage requirements. Federal tax legislation requires the accumulated net excess of interest income on the proceeds of these issues over interest expense paid on the bonds be paid to the Federal government at the end of a five-year period. There was an arbitrage liability as of June 30, 2009 in the amount of \$493,111.00. There was an arbitrage liability as of June 30, 2010 in the amount of \$72,158.00. As of June 30, 2011, there was an arbitrage liability of \$76,295.00.

17. DEBT PAYABLE

Defeased Debt

In prior years, the Water Fund defeased certain bonds by placing the proceeds of new bonds in irrevocable trusts to provide for all future debt service payments on old bonds. Accordingly, the trust account assets and the liability for the defeased bonds are not included in the Water Fund's financial statements. At year end, \$171.0 million of bonds outstanding was considered defeased.

Financings

On August 4, 2010, PWD settled on \$185,000,000 in new money revenue bonds. The bonds were issued as the City of Philadelphia, Pennsylvania-Water and Wastewater Revenue Bonds, Series 2010C. The net proceeds of \$170.5 million from these bonds will be used to fund a portion of the Water Department's 2011 to 2016 Capital budget and to pay costs related to the transaction. The City also terminated the two forward-starting 2007 Swap agreements as further described in the forepart of the Official Statement for this transaction.

The bonds were issued at true interest cost of 4.373226%. The final bond maturity was in 2040 and had a yield of 4.884%. The 2010C issue was insured by AGM. The financing included the termination of the Wachovia Bank (now Wells Fargo Bank) forward-starting Swap agreement on July 27, 2010 which resulted in a termination payment of \$15,015,000 which was funded with proceeds of the 2010C bonds and will be amortized over the life of these bonds for GAAP accounting purposes. The Department received confirmation of its existing bond ratings from each of the three major bond rating agencies. (Moody's: A1, S&P: A, Fitch: A+).

Pennvest Loans

On April 20, 2009, the Water Department received notice that Pennvest (the Pennsylvania State Infrastructure Financing Authority) had approved three traditional water and sewer applications, totaling \$184.9 million. These applications were approved for funding through low interest loans of 1.193% during the construction period and for the first five years of amortization (interest-only payments are due during the construction period, up to three years) and 2.107% for the remaining 15 years. In addition, a \$30,000,000 "green infrastructure" application was also approved for funding through a low-interest loan on the same terms. Debt service for these loans has been included in the Department's Fiscal Year 2011 and 2012 budgets, the Department's five-year plan projections and the Engineering Report. These loans are being provided on an interest-only basis during the construction period of up to three years, after which they are amortized on a 20-year basis at 1.193% for the first five years and 2.107% for the next 15 years. A supplemental ordinance to the Restated General Ordinance authorizing \$350,000,000 in new borrowing (the Twelfth Supplemental Water Bond Ordinance No. 090321) was introduced and approved by City Council in May, 2009. The City and Pennvest finalized loan documents on the three traditional loans described above during FY 2010.

Pennvest loan number 83104 (series 2009B), for water treatment plant improvements, was settled on October 14, 2009. The maximum loan amount is \$42,886,030. Estimated project costs are currently \$32,658,978. Project draws (including retainage), in the amount of \$17,397,424, have been requested through June 30, 2010 of which \$15,595,211 was received through June 30, 2011. Interest-only payments on this loan began on September 1, 2011. Total project draws through December 31, 2011 have totaled \$18,990,956.

Pennvest loan number 83105 (series 2009C), for water main replacements, was settled on October 14, 2009. The maximum loan amount is \$57,268,193. Estimated project costs are currently \$48,067,575. Project draws (including retainage), in the amount of \$37,206,823, have been requested and \$23,068,887 have been received through June 30, 2011. Interest-only payments on this loan began on July 1, 2010. Total project draws through December 31, 2011 have totaled \$35,666,542.

Pennvest loan number 27771 (series 2009D), for sewer projects, was settled on March 31, 2010. The maximum loan amount

is \$84,759,263. Estimated project costs are currently \$82,084,703. Project draws (including retainage) in the amount of \$51,447,572 have been requested through June 30, 2010. Reimbursements of \$48,583,956 were received on this loan through June 30, 2011. Interest-only payments began on this loan on August 1, 2010. Total project draws through December 31, 2011 have totaled \$48,583,956.

Pennvest loan number 75235 (series 2010B), for "green" projects was completed on February 16, 2011. The maximum loan amount is \$30,000,000. Estimated project costs are currently \$30,000,000. No project draws were requested or received through June 30, 2011. Interest-only payments will begin a month after the first draw is received. Total project draws through December 31, 2011 have totaled \$6,338,449.

Additional debt service for these loans was included in the Department's Fiscal Year 2011 budget, the Department's five-year plan projections and the Engineering Report. These loans are being provided on an interest-only basis during the construction period of up to three years, after which they are amortized on a 20-year basis at 1.193% for the first five years and 2.107% for the next 15 years. The Pennvest loans were authorized through a supplemental ordinance to the Restated General Ordinance (the Twelfth Supplemental Water Bond Ordinance No. 090321).

Subsequent Events

On August 23, 2011, the outstanding balance of \$70,100,000 of Water and Wastewater Revenue Bonds, Variable Rate Series 1997B, was remarketed under an irrevocable direct-pay letter of credit from TD Bank. The LOC will constitute both a credit facility and liquidity facility from TD Bank, N.A. The Bonds continue to have a weekly interest rate reset and mature in 2027.

On October 1, 2011, the City and Water Department agreed to an extension of the existing Letter of Credit from Bank of America, N.A., supporting the Water and Wastewater Revenue Refunding Bonds, Series 2005B. The Bonds were not remarketed, nor was the existing amortization changed. The Bonds continue to have a weekly interest rate reset and mature in 2018.

On November 9, 2011, PWD settled on \$184,855,000 of new money and refinancing bonds, the City of Philadelphia Water and Wastewater Revenue Bonds, Series 2011A and Water and Wastewater Revenue Refunding Bonds, Series 2011B. Net proceeds of the \$135,000,000 Series A bonds will be used to fund a portion of the Water Department's Capital Budget and to pay costs of issuance. Net proceeds of the \$49,855,000 Series 2011B were used to refinance certain outstanding Water and Wastewater Revenue Bonds, to capitalize interest and to pay costs of issuance. The bonds were issued at a true interest cost of 4.556%. The final bond matures in 2041 at a yield of 4.60%.

Future Financings

Approximately 60% of the costs of the Capital Improvement Program are expected to be funded with the proceeds of debt to be incurred during the FY2012-2017 Capital Improvement Program. The City expects most of such debt to be in the form of Water and Wastewater Revenue Bonds issued under the Act and the General Ordinance. A portion of the debt may be evidenced by loans to the City from Pennvest, established by the Commonwealth to provide low-interest cost financing for water and wastewater projects within the Commonwealth. Such loans are expected to be evidenced by water and wastewater revenue bonds. Any additional loans received by the Water Department from Pennvest will reduce the amount of future Water and Wastewater Revenue Bonds to be issued.

In addition to the \$215 million of Pennvest Loans described earlier, The emphasis of the Capital Improvement Program is on the renewal and replacement of the water conveyance and sewage collection systems along with improvements to the water and wastewater treatment plants. Additional Revenue Bond issues are anticipated during or after Fiscal Year 2011 as necessary to fund the approved capital program. Black & Veatch Corporation has made certain assumptions in its Engineering Report with respect to inflation which are not reflected in the formal Capital Improvement Plan of the Water Department.

Another \$350 million issue is planned for Fiscal 2015, but has not yet been authorized.

City of Philadelphia Water & Sewer Swap Interest Rates

| City Entity | Water |
|--------------------------|-------------------------------------|
| Related Bond Series | 2005 Refunding |
| Initial Notional Amount | \$86,105,000 |
| Current Notional Amount | \$82,870,000 |
| Termination Date | 8/1/2018 |
| Product | Fixed Payer Swap (1) |
| Rate Paid by Dealer | Bond Rate/ 68.5% - 1 month LIBOR |
| Rate Paid by City Entity | 4.53% |
| Dealer | Citigroup Financial Products, Inc. |
| Dealer Rating | A3/A (Citigroup, Inc.) |
| Fair Value (3) | (\$12,519,273) |

Notes:

(1) The City received an up-front payment of \$4,000,000 for the related swaption. Citigroup exercised its option to enter into the Swap on 5/4/2005. Under the Swap, the City receives the bond rate or 68.5% of one-month LIBOR in the event of an Alternative Floating Rate Date. An Alternative Floating Rate Date has been triggered and the City is currently receiving the LIBOR-based rate.

(2) Fair values are shown from the City's perspective and include accrued interest.

City of Philadelphia, 2005 Water & Sewer Swap

Objective: In December, 2002, the City entered into a Swaption that provided the City with an up-front payment of \$4.0 million. As a synthetic refunding of all or a portion of its 1995 Bonds, this payment approximated the present value savings, as of December 2002, of a refunding on May 4, 2005. The Swaption gave Citigroup (formerly of Salomon Brothers Holding Company, Inc), the option to enter into an interest rate Swap to receive fixed amounts and pay variable amounts.

Terms: Citigroup exercised its option to enter into a Swap on May 4, 2005, and the Swap commenced on that date. Under the terms of the Swap, the City pays a fixed rate of 4.53% and receives a variable payment computed as the actual bond rate or alternatively, 68.5% of one-month LIBOR, in the event the average rate on the Bonds as a percentage of the average of one-month LIBOR has exceeded 68.5% for a period of more than 180 days. Citigroup exercised its option during this fiscal year to pay 68.5% of one-month LIBOR under the Swap. The payments are based on an amortizing notional schedule (with an initial notional amount of \$86.1 million), and when added to an assumption for remarketing, liquidity

costs and cost of issuance were expected to approximate the debt service of the refunded bonds at the time the Swaption was entered into.

As of June 30, 2011, the Swap had a notional amount of \$82.9 million and the associated variable-rate bond had an \$82.9 million principal amount. The bonds' variable-rate coupons are not based on an index but on remarketing performance. The bonds mature on August 1, 2018, and the related Swap agreement terminates on August 1, 2018.

Fair value: As of June 30, 2011, the Swap had a negative fair value of (\$12.5 million). This means that the Water Department would have to pay this amount if the Swap terminated.

Risk: As of June 30, 2011 the City is not exposed to credit risk because the Swap had a negative fair value. Should interest rates change and the fair value of the Swap become positive, the City would be exposed to credit risk in the amount of the Swap's fair value. Since the City is now receiving 68.5% of one-month LIBOR, the City is exposed to (i) basis risk, as reflected by the relationship between the variable-rate bond coupon payments and 68.5% of one-month LIBOR received on the Swap, and (ii) tax risk, a form of basis risk, where the City is exposed to a potential additional interest cost in the event that changes in the Federal tax system or in marginal tax rates cause the rate paid on the outstanding bonds to be greater than the 68.5% of LIBOR received on the Swap. The Swap includes an additional termination event based on credit ratings. The Swap may be terminated by the City if the ratings of Citigroup or its Credit Support Provider fall below A3 and A-, or by Citigroup if the rating of the City's Water and Wastewater Revenue Bonds falls below A3 or A-. There are 30-day cure periods to these termination events. However, because the City's Swap payments are insured by Assured Guaranty Municipal Corporation (formerly FSA), no termination event based on the City's Water and Wastewater Revenue Bond ratings can occur as long as Assured is rated at least A or A2.

As of June 30, 2011, rates were as follows:

| Terms | Rates | |
|--|--------------------------|------------|
| Internet Rate Swap | | |
| Fixed payment to Citi under Swap | Fixed | 4.53000% |
| Variable rate payment from Citi under Swap | 68.5% of one-month Libor | (0.12710)% |
| Net interest rate Swap payments | | |
| Variable rate bond coupons payments | Weekly resets | 0.06000% |
| Synthetic interest rate on bonds | | 4.46290% |

Swap payments and associated debt: As of June 30, 2011, debt service requirements of the variable-rate debt and net Swap payments for their term, assuming current interest rates remain the same, were as follows:

| Fiscal Year Ending | Variable Rate Bonds | Interest Rate | Total | |
|--------------------|---------------------|---------------|--------------------|------------|
| June 30 | Principal | Interest | Swaps Net Interest | |
| 2012 | 425,000 | 49,722 | 3,648,682 | 3,698,404 |
| 2013 | 450,000 | 49,467 | 3,629,969 | 3,679,436 |
| 2014 | 14,820,000 | 49,197 | 3,610,156 | 3,659,353 |
| 2015 | 15,535,000 | 40,305 | 2,957,647 | 2,997,952 |
| 2016 | 16,315,000 | 30,984 | 2,273,657 | 2,304,641 |
| 2017-2019 | 35,325,000 | 32,202 | 2,363,035 | 2,395,237 |
| Total | 82,870,000 | 251,877 | 18,483,146 | 18,735,023 |

City of Philadelphia 2007 Water & Wastewater Swaps

In February, 2007, the City entered into two forward-starting Swaps to take advantage of the current low interest rate environment in advance of the issuance of Water and Wastewater Revenue Bonds expected to be issued by the City in 2008. The \$180 million notional amount was evenly split between two counterparties, Merrill Lynch Capital Services, Inc. and Wachovia Bank, N.A. The Merrill Lynch Capital Services Swap had an initial notional value of \$90 million, with a fixed rate of \$4.52275% and a floating rate equal to the SIFMA Index. On June 30, 2010, the Swap between the City and Merrill Lynch Capital Services was terminated. The City paid a Swap termination payment of \$15.2 million to Merrill Lynch Capital Services, Inc. In addition, \$15.0 million of the proceeds from the Water and Wastewater Revenue Bonds Series 2010C were used to terminate the Swap with Wachovia Bank on July 27, 2010.

18. BOND RATINGS, AS OF JUNE 2011:

As of June 30, 2011, the City's Water and Wastewater Revenue Bonds had underlying ratings of "A1" from Moody's Investor's Service, "A" from Standard & Poor's Rating Services, and "A+" from Fitch Ratings.

Subsequent Events

In October 2011, pursuant to the sale of the City's Water and Wastewater Revenue Bonds, Series 2011A, and Water and Wastewater Revenue Refunding Bonds, Series 2011B (the "Bonds"), Moody's affirmed the underlying "A1" rating and stable outlook.

Moody's listed the following strengths and challenges of the Water Revenue credit:

STRENGTHS

- Large system serving a stable, diverse population of 1.7 million
- Legal authority to raise rates without city or council approval
- Strong reserve position

CHALLENGES

- Moderately weak legal structure that allows for use of reserves to meet coverage
- Typically below average coverage ratios
- Above average debt profile with significant additional debt planned

Pursuant to the sale of the Bonds, Standard & Poor's Rating Services affirmed the underlying "A" rating and stable outlook. In the report, S&P commented that:

The 'A' long-term rating and SPUR are based on the following characteristics:

- A broad service area that covers the city of Philadelphia and several suburbs, but with an overall weak economic profile when comparing income levels and unemployment rates with state and national averages;
- Rates we consider competitive, even with the weaker economic profile, along with management's historical willingness to raise rates annually;
- Stable financial performance, albeit with ongoing reliance on its rate stabilization fund to support operations; and
- A sizable capital improvement plan (CIP) combined with an already high system ratio of debt to capital, in our opinion.

Pursuant to the sale of the Bonds, Fitch Ratings affirmed the underlying "A+" rating and stable outlook. In their report, Fitch mentions the following:

KEY RATING DRIVERS

- **Essential Service:** The city's combined water and wastewater system (the system) provides an essential service to a large and diverse service area.
- **Ample Capacity:** Water supply and overall system treatment capacity are sufficient for the foreseeable future.
- **Sound Management and Stable Operations:** Consistent operating results, sound liquidity, and the ability of management to establish rates independent of city council approval offsets narrow debt service coverage levels.
- **Below-Average Economic Characteristics:** The service area exhibits weak income levels and above-average unemployment, which contributes to chronically poor collection rates.
- **Elevated Debt Levels:** The system has above-average debt levels with sizeable additional borrowing plans expected over the medium term.
- **Large Capital Plan:** The capital program remains sizeable, although required projects stemming from a consent order do not appear onerous.

| CITY OF PHILADELPHIA'S (WATER) BOND RATINGS | | | |
|--|-------------------------------|----------------------------|------------|
| YEAR | MOODY'S INVESTOR'S SERVICE | STANDARD & POOR'S CORP. | FITCH ICBA |
| 2011 | A1 | A | A+ |
| 2010 | A1 | A | A+ |
| 2009 | A3 | A | A- |
| 2008 | A3 | A | A- |
| 2007 | A3 | A- | A- |
| 2006 | A3 | A- | A- |
| 2005 | A3 | A- | A- |
| 2004 | A3 | A- | A- |
| 2003 | A3 | A- | A- |
| 2002 | A3 | A- | A- |
| 2001 | A3 | A- | A- |
| 2000 | Baa1 | BBB+ | A- |
| 1998 | Baa1 | BBB+ | BBB+ |
| 1997 | Baa1 | BBB | BBB+ |
| 1995 | Baa | BBB | BBB+ |
| 1993 | Baa | BBB- | BBB |
| 1991 | B | BBB | BBB |
| 1990 | Baa | BBB | |
| 1974 | A | A | |

19. PENSION PLAN

The City, via the Municipal Pension Plan, maintains the following employee retirement system:

(1) City Plan

(a) Plan Description

The Philadelphia Home Rule Charter (the Charter) mandates that the City maintain an actuarially sound pension and retirement system. To satisfy that mandate, the City's Board

of Pensions and Retirement maintains the single-employer Municipal Pension Plan (the Plan). The Plan covers all officers and employees of the City and officers and employees of five other governmental and quasi-governmental organizations. By authority of two Ordinances and related amendments passed by City Council, the Plan provides retirement benefits as well as death and disability benefits. Benefits vary by the class of employee. The Plan has two major classes of members – those covered under the 1967 Plan and those covered under the 1987 Plan. Each of these two plans has multiple divisions. In Fiscal 2011, a third plan was enacted that features a defined benefit and a defined contribution component.

Retirement Benefits

An employee, who meets the age and service requirements of the particular division in which he participates, is entitled to an annual benefit, payable monthly for life, equal to the employee's average final compensation multiplied by a percentage that is determined by the employee's years of credited service. The formula for determining the percentage is different for each division. If fund earnings exceed the actuarial assumed rate by a sufficient amount, an enhanced benefit distribution to retirees, their beneficiaries and their survivors shall be considered. A deferred vested benefit is available to an employee who has 10 years of credited service, has not withdrawn contributions to the system and has attained the appropriate service retirement age. Members of both plans may opt for early retirement with a reduced benefit. The Deferred Retirement Option Plan (DROP) was initiated on October 1, 1999. Under this plan, employees who reach retirement age may accumulate their monthly service retirement benefit in an interest-bearing account at the Board of Pensions for up to four years and continue to be employed by the City of Philadelphia.

Death Benefits

If an employee dies from the performance of duties, his/her spouse, children or dependent parents may be eligible for an annual benefit ranging from 15% to 80% of the employee's final average compensation. Depending on age and years of service, the beneficiary of an employee who dies other than from the performance of duties will be eligible for either a lump-sum benefit only, or a choice between a lump sum or an annual pension.

Disability Benefits

Employees disabled during the performance of duties are eligible for an immediate benefit equal to contributions, plus a yearly benefit. If the employee subsequently becomes employed, the benefit is reduced by a percentage of the amount earned. Certain employees who are disabled other than during the performance of duties are eligible for an ordinary disability payment if they apply for the benefit within one year of termination. If the employee subsequently becomes employed, the benefit is reduced by a percentage of the amount earned.

Membership

Membership in the plan as of July 1, 2010 was as follows:

| | |
|---|--------|
| Retirees and beneficiaries currently receiving benefits: | 35,110 |
| Terminated members entitled to benefits but not yet receiving them: | 2,018 |
| Active Members: | 27,928 |
| Total Members: | 65,056 |

The Municipal Pension fund issues a separate annual financial report. To obtain a copy, contact the Director of Finance of the City of Philadelphia.

(b) Funding Policy

Employee contributions are required by City Ordinance. For Plan 67 members, employees contribute 3.75% of their total compensation that is subject to Social Security Tax and 6% of compensation not subject to Social Security Tax. Plan 87 contribution rates are defined for the membership as a whole by Council ordinance. Rates for individuals are then determined annually by the actuary so that total individual contributions satisfy the overall rate set by Council.

The City is required to contribute the remaining amounts necessary to fund the Plan, using an acceptable actuarial basis as specified by the Home Rule Charter, City Ordinance and State Statute. Court decisions require that the City's annual employer contributions are sufficient to fund:

- The accrued actuarially determined normal costs;
- Amortization of the unfunded actuarial accrued liability determined as of July 1, 1985. The portion of that liability attributable to a class action lawsuit by pension fund beneficiaries (the Dombrowski suit) is amortized in level installments, including interest, over 40 years through June 30, 2009. The remainder of the liability is amortized over 34 years with increasing payments expected to be level as a percentage of each year's aggregate payroll.
- Amortization in level dollar payments of the changes to the July 1, 1985 liability due to the following causes over the stated period:
 - Non-active member's benefit modifications (10 years)
 - Experience gains and losses (15 years)
 - Changes in actuarial assumptions (20 years)
- Under the City's current funding policy, the total required employer contribution for the current year amounted to \$701.3 million or 50.0% of covered payroll of \$1,410.2 million. The City's actual contribution was \$455.9 million. The City's contribution did not meet the Minimum Municipal Obligation (MMO) as required by the Commonwealth of Pennsylvania's Acts 205 and 189.

In Fiscal Year 2010, the City made several changes to the pension plan based on Act 44, which provided a new method of determining municipal distress levels and alternative funding relief in response to the 2008/2009 market decline. The City adopted fresh start amortization, alternating to 30 years, and lowered the assumed rate of interest from 8.75% to 8.25%, assuming a partial deferral of the pension payments in Fiscal Years 2010 and 2011 of \$150 million and \$90 million respectively, which must be repaid by Fiscal Year 2014. The change in the amortization period and the partial deferral were approved by the Commonwealth of Pennsylvania General Assembly's Act 44. Act 44 also allowed the City to temporarily impose an additional local sales tax of 1.0% to fund future MMO Payments.

The Annual Pension Cost and related percentage contributed for the three most recent fiscal years are as follows:

| (Millions of USD) | | | |
|---------------------------|---------------------|------------------------|------------------------|
| Fiscal Year Ended June 30 | Annual Pension Cost | Percentage Contributed | Net Pension Obligation |
| 2009 | 559.0 | 81.47% | (456.0) |
| 2010 | 597.0 | 28.74% | (171.6) |
| 2011 | 721.7 | 11.08% | 80.0 |

The actuarial valuation to compute the current year's required contribution was performed as of July 1, 2010. Methods and assumptions used for that valuation include:

- The individual entry age actuarial cost method
- A ten-year smoothed market value method for valuing investments
- A level percentage closed method for amortizing the unfunded liability
- An annual investment rate of return of 8.15%
- Projected annual salary increases based on new age based scale
- Payroll growth rate is 3.5%
- No post-retirement benefit increases

Administrative costs of the Plan are paid out of the Plan's assets.

(c) Annual Pension Cost and Net Pension Obligation

The City and other employers' annual pension cost and net pension obligation (NPO) for the Municipal Pension Plan for the current year were as follows:

| (Thousands of USD) | |
|--|-----------|
| Annual Required Contribution (ARC) | 715,544 |
| Interest on Net Pension Obligation (NPO) | (14,155) |
| Adjustment to ARC | 20,353 |
| Annual Pension Cost | 721,742 |
| Contributions Made | (470,155) |
| Increase in NPO | 251,587 |
| NPO at Beginning of Year | (171,576) |
| NPO at End of Year | 80,011 |
| Interest Rate | 8.25% |
| 15-Year Amortization Factor (EOY) | 8.43% |

(d) Summary of Significant Accounting Policies

Financial statements of the Plan are prepared using the accrual basis of accounting. Contributions are recognized as revenues when due, pursuant to formal commitments, as well as statutory or contractual requirements. Benefits and refunds paid are recognized when due and payable in accordance with the terms of the plan.

20. OTHER POST EMPLOYMENT BENEFITS (OPEB)

Primary Government

Plan description: The City of Philadelphia self-administers a single employer, defined-benefit plan and provides health care for five years subsequent to separation for eligible retirees. Certain union-represented employees may defer their coverage until a later date but the amount that the City pays for their health care is limited to the amount that the City would have paid at the date of their retirement. The City also provides lifetime insurance coverage for all eligible retirees. Firefighters are entitled to \$7,500 coverage and all other employees receive \$6,000 in coverage. The plan does not issue stand-alone financial statements, and the accounting for the plan is reported within the financial statements of the City of Philadelphia.

Funding Policy: The City funds its retiree benefits on a pay-as-you-go basis. To provide health care coverage, the City pays a negotiated monthly premium for retirees covered by union contracts and is self-insured for non-unionized employees. For Fiscal Year 2011, the City paid \$65.5 million for retiree healthcare.

Annual OPEB Cost and Net OPEB Obligation: The City's annual other post-employment benefit (OPEB) expense is calculated based on the annual required contribution of the employer (ARC), an amount actuarially determined in accordance with the parameters of GASB statement 45. The ARC represents a level of funding which, if paid on an ongoing basis, is projected to cover normal costs each year and amortize any unfunded actuarial liabilities over a period not to exceed thirty years. The following table shows the components of the City's annual OPEB cost for the year, the amount actually contributed to the plan and changes in the net OPEB obligation (dollar amount in thousands).

| (Thousands of USD) | |
|--|----------|
| Annual Required Contribution | 101,216 |
| Interest on Net OPEB Obligation | 2,165 |
| Adjustment to ARC | (1,668) |
| Annual OPEB Cost | 101,713 |
| Payments Made | (65,533) |
| Increase/Decrease in net OPEB Obligation | 36,180 |
| Net OPEB Obligation – Beginning of Year | 43,301 |
| Net OPEB Obligation – End of Year | 79,481 |

Funded Status and Funding Progress: As of July 1, 2010, the most recent actuarial valuation date, the City is funding OPEB on a pay-as-you-go basis and, accordingly, the unfunded actuarial accrued liability for benefits was \$1.2 billion. The covered annual payroll was \$1.419 billion and the ratio of the UAAL to the covered payroll was 82.4 percent.

Actuarial Methods and Assumptions: Costs were determined according to the individual entry age actuarial cost method with the attribution period ending at each decrement age. This is consistent with the cost method used for the City of Philadelphia Municipal Retirement System. Unfunded liabilities are funded over a 30-year period as a level percentage of payroll, which is assumed to increase at a compound annual rate of 4% per year. The actuarial assumption included a 5.0% compound annual interest rate on the City's general investments.

21. CLAIMS, LITIGATION AND CONTINGENCIES

Generally, claims against the City are payable out of the General Fund, except claims against the City Water Department, City Aviation Division, or Component Units which are paid out of their respective funds and only secondarily out of the General Fund, which is then reimbursed for the expenditure. Unless specifically noted otherwise, all claims hereinafter discussed are payable out of the Water Fund. The Act of October 5, 1980, P.L. 693, No. 142, known as the "Political Subdivision Tort Claims Act," established a \$500,000 aggregate limitation on damages arising from the same cause of action or transaction or occurrence, or series of causes of action, transactions or occurrences with respect to governmental units in the Commonwealth, such as the City. The constitutionality of that aggregate limitation has been upheld by the United States Supreme Court. There is no such limitation under Federal law.

Various claims have been asserted against the Water Department and, in some cases, lawsuits have been instituted. Many of these claims are reduced to judgment or otherwise settled in a manner requiring payment by the Water Department. At year-end, the aggregate estimate of loss deemed to be probable is \$8.8 million.

In addition to the above, there are other lawsuits against the Water Department in which some amount of loss is reasonably possible. The aggregate estimate of the loss, which could result if unfavorable legal determinations were rendered against the Water Department with respect to these lawsuits, is \$5.4 million.

22. ENHANCED SECURITY

In light of the events of September 11, 2001, when terrorists struck the United States, the Water Department took steps to improve the security of the City's water supply and all other major Water Department facilities and assets. These steps were taken in close coordination with the City's Managing Director's Office and all other appropriate City agencies and departments.

The Water Department is a representative agency in the City of Philadelphia Emergency Operations Center (EOC). The EOC is designed to permit City emergency personnel to respond quickly to any major event through specialized computer and communications equipment, including a backup 911 system. This Center can accommodate around-the-clock staffing by officials from the Police, Fire, Health and Water Departments and additional City agencies. The Water Department remains in contact with Federal, State and local law enforcement and emergency personnel and has performed a vulnerability analysis of its entire potable water system. The work was primarily funded by the EPA. The Water Department delivered its report to the EPA on March 31, 2003. Details of the enhanced security measures already taken and those presently under consideration cannot be disclosed.

It should be noted that the Water Department had an extensive water quality protection and security plan in place prior to the events of September 11, 2001. All finished water basins are completely covered; all plants are fenced in and topped by barbed wire; gates are secured; video surveillance equipment has been installed; and the Water Department continues to draw and conduct nearly one thousand tests on water samples from

various locations each day. Municipal guards were assigned to the main entrance at each water plant in 2002 to limit access to the facility to authorized persons and/or deliveries only. Online water quality monitors provide continuous testing of all stages of the treatment process.

To further ensure the safety and quality of the City's drinking water, the Water Department will continue to expand its network to continuously monitor water quality using online instrumentation. The system provides the Department with the ability to track real-time water quality conditions at strategic locations throughout the City's water distribution system and to monitor any variations, should they occur. Water quality data is currently transmitted from more than twenty monitoring sites to the Water Department's central laboratory where engineers and scientists check for early warning signs of water quality deterioration and document any unforeseen changes. The water treatment plants have online instrument clusters at multiple raw and finished water locations. These monitors will also be connected to the distribution system's monitoring network. The Water Department plans to assess the performance of the monitoring system at the current locations while continuing to investigate alternative technology for further installations at wholesale customer interconnects, pumping stations and other critical points in the distribution system.

Recently, the EPA, under its Water Security Initiative program, awarded a grant to the Water Department to develop and install a Contamination Warning System Demonstration Pilot for detecting and mitigating possible contamination of the City's drinking water distribution system. Philadelphia, New York, San Francisco and Dallas were the cities selected for this research pilot program. The City's project included total costs of \$12,599,846. On November 21, 2008, the Department was notified that appropriations for the initial phase of the project totaling \$2,677,963 were approved. The initial phase included \$2.0 million in Federal funds and \$677,963 in local share. In 2009, PWD received \$5.75 million of Federal funding. PWD received an additional \$3.75 million in calendar year 2010, which completed the full \$9.5 million Federal share for the Demonstration Pilot. The City's share will comprise approximately \$3 million when the project is finished. More than 80% of the City's share is comprised of services-in-kind comprised of salaries and benefits for existing City employees assigned to the project.

The City recently received a grant to design and install Emergency Back-up Power generation at key facilities. The Water Department's treatment and finished water pumping stations were included. Installation of Back-up Power Generators was completed at the Belmont High-Service Pumping Station in 2007 and at the Samuel S. Baxter Water Treatment Plant in 2009. Capital contract work began in late 2009 on Emergency Back-up Power generation installations at the Torresdale High-Service Pump Station and the Roxborough High-Service Pump Station. Design work is underway on Emergency Generation equipment for East Oak Lane Reservoir Pump Station and Fox Chase Booster Pumping Station. The remainder of the Water Department facilities are scheduled for design and construction over the next five fiscal years, with the final facility being in-service in 2015.

**Philadelphia
Water
Department**

**2011
Annual Financial
Report**



Honorable Michael Nutter
Mayor

Darrell Clarke
President of City Council

Richard Negrin
Deputy Mayor
Administration and Coordination
Managing Director

Rob Dubow
Finance Director

Rina Cutler
Deputy Mayor
Transportation and Utilities

Howard M. Neukrug, P.E.
Water Commissioner

Mami Hara
Chief of Staff

Joseph S. Clare III
Deputy Water Commissioner
Finance and Administration

David A. Katz, Esq.
Deputy Water Commissioner
Environmental Policy

Debra A. McCarty
Deputy Water Commissioner
Operations

Christopher S. Crockett, Ph.D., P.E.
Deputy Water Commissioner
Planning and Environmental
Services

Gerald Leatherman, Esq.
General Counsel to the
Water Department

Michelle Bethel
Deputy Revenue Commissioner
Water Revenue Bureau

Stephen J. Furtek, P.E.
General Manager
Planning and Engineering

Joanne Dahme
General Manager
Public Affairs

Geoffrey Brock
General Manager
Information Science and Technology

